

Contents

Foreword	3
Media Disseminates ICT ideas	4
ICTs help transform lives of rural women in Zambia	10
'Expensive' Computer Syndrome	16
Zambia's tele-health sector gets Boost	22
IXP's to perk up internet services in Africa	26
The Zambian Chawama Youth Project brings life skills to local youth and women through ICTs	32
WIDnet is building a clearinghouse of information on women and gender initiatives in Zambia	36
Farmers' Internet cafe in Zambia	40
Spreading the impact of community radio stations across Zambia	44
UTH's Connectivity to enhance Malaria research	56
ICT Project to link farmers with research	62
Coldreed Training (CRT) building people's capacities through ICT training	68

ICT's: An important tool for economic development	72
ICTs bring hope to peasant farmers	78
ICT's: Catalyst for enhancement of the Zambia's informal sector	84

Overall Editing:
Glory Mushingwe

Quality Controlling:
Glory Mushingwe & Brenda Zulu

Design & Layout:
Diana Mwilwa Mulilo
(Emerging Int'l Assets)
260 1 231069

Proof Reading:
Saskia Hamsen, Frans Neuman & Tjalling Vonk (IICD)

Photos: MIND
Special Appreciation to:
Christopher Annear
(For Additional photos)

Cover Picture: *The Post Newspaper*

Distribution:
MIND, IICD and eBrain Forum of Zambia
(eBrain is the Zambian information network that MIND is in partnership with, in raising awareness and promoting knowledge sharing on ICT4D in Zambia.
Www.ebrain.zm

Acknowledgement

The Media and ICT's Network for Development (MIND) would like to thank The International Institute for Communication and Development (IICD) for the financial and moral support it rendered towards the production of this booklet. We appreciate the partnership that exists between us and the IICD, and indeed other partners too numerous to mention. We would also like to take advantage of this opportunity to thank all MIND members as well as individuals outside the network that have and do support, and believe in the work of the network.

Foreword



The world is experiencing tremendous change as it transforms into an extraordinary information society where the availability of timely and accurate information is a prerequisite to development than ever before.

This has created the necessity for people to desire the use of proper information channels in order to acquire, store and disseminate information effectively.

In this process, the use of new Information and Communications Technologies (ICT's) such as Computers and the Internet among others, has been seen to be cardinal as they (the tools) now offer the best and quickest way of transmitting information, which if used well could offer development to communities and society as a whole.

However, as much as this new phenomenon offers hope for development, many people, especially those from developing countries and rural areas do not understand what the ICT's are and are all about and do not therefore embrace or/and use them effectively to change their lives for better or easier.

There is therefore, a need to sensitise people about ICT's and how they could be used for development, and the media being a sector that plays a significant role in information dissemination needs to assume responsibility in this kin of sensitisation, so that people are enlightened and are able to use ICT's for their development and the development of the communities they live in and indeed the society as a whole.

The media needs to carry out that kind of sensitisation through covering/reporting about events and issues surrounding ICT's in a balanced and analytical manner as well as being part of activities to that effect.

In this booklet, we have tried to capture good examples of how ICT's could be and are being used for development by individuals, communities and the country as a way of encouraging and sensitising people about the tools.

This booklet is being produced by the Media and ICT's Network for Development (MIND), the first network of ICT Journalists and other media people in Africa, and parts of the world, founded in 2003 with the intention of contributing towards the enhancement of ICT's and the information society through among other activities providing constant coverage of ICT issues and activities in simplified terms and using practical examples of ICT for Development, ICT policy document intervention and working in partnership with stakeholders in various ICT activities, locally and internationally.

With funding from our partner organisation, The International Institute for Communication and Development (IICD) of The Netherlands, the booklet focuses mainly on Zambian development oriented projects that are using ICT's for their operations and to develop communities and people's livelihoods either directly or indirectly.

We have thus provided about 15 feature articles in the booklet, which has been written, compiled and designed by member Journalists of the network with the hope that it will help demystify some of the terminologies that often sound foreign and result into people exercising apathy to ICT's under the misunderstanding that ICT's is for the elite.

We expect also that the articles in the booklet will demonstrate to people that ICT's is for everyone and could be used in our day to day activities. We also expect that the publication will help bring to the attention of influential authorities locally and international, the contributions, challenges and successes that are being faced by the communities and Zambia as a country towards the enhancement of the Information Society in the nation, continent and the world.

Glory Mushinge
Chairperson

Media Disseminates ICT ideas



By Henry Kabwe

In 2003, a group of 21 journalists were invited through the Zambian chapter of the Media Institute of Southern Africa (MISA Zambia) sponsored by the Media Action International (MAI) based in Switzerland. The fraternity was billed to attend a media workshop on Information and Communication Technologies (ICTs) to orient them to the World Summit on the Information Society (WSIS). The first WSIS phase took place in Geneva, Switzerland and the second one in Tunisia in December, 2003 and November 2005 respectively. To many participants, ICT gadgets were so familiar to them that nothing more was expected from their use apart from the notion that they were a means to an end the writing of news or feature articles.

Most sessions were conducted by MAI Programmes Officer Rosita Eriksson who emphasised the need for people to use ICTs to realise developmental and cultural goals.

That workshop, after paper presentations from Mercy Khozi, who was then with the Panos Institute of Southern Africa, Martin Musunka from Southern Africa Journalists Association (SAJA) and Kunda Mwila from ZAMNET Communications (an Internet service provider) propelled the formation of a unique organisation that was named Media and ICT Network for Development (MIND).

“The computer market on this market has admittedly changed in the positive line and is slowly but steadily making expansion strides. The advantages that have been accrued in the information society need to be extended to the benefit of players whose daily work depends on modern technology, especially in the journalist fraternity,” said Musunka, the president of SAJA.

With the consequent formation of MIND, articles, that have carried information to create an atmosphere where ICTs are not looked at as an invention that has come to benefit the western world but society as a whole, have been published and broadcast in the print media and electronic channels respectively.

Prompt action by the ten member interim committee and later an elected one chaired by Glory Mushingi, a founder member, made strides to link the organisation to effective ICT organisations like International Institute for Communication and Development (IICD), United Nations Economic Commission for Africa (UNECA), which helped in facilitating the iConnect media project, One World Africa, the Computer Society of Zambia, the e-Brain Forum, the Communication Authority of Zambia and the ICT Committee that is working at the ICT Policy formulation in Zambia in 2003.

MIND instituted some parameters like discussion groups through a mailing list, affiliated to the IICD website.

Recent revolutions in information communication technologies have significantly changed the way of life in the whole world with globalisation engulfing people whether they like it or not.

Ms Mushingi says the funding from IICD has enabled MIND to run two projects where member journalists do articles to appear in the iConnect website/magazine and in the other project MIND members publish stories at national level in the local media while IICD publishes them at the global level.

Iconnect is an initiative under MIND that encourages Journalists to write stories at grassroots level to highlight interventions taking place through ICT's

“Partnership with IICD has given us support to report on ICTs best practices for development. In this project, members come up with good story ideas representing projects in the country that are using ICTs in their operations and thereafter distribute in different media organisations; both in print and online as a way of having constant coverage of ICTs,” she says.

Ms Mushingi says MIND is also connected to the iConnect supported by IICD and done by different networks around the world. MIND is the one contributing to the magazine from Zambia coordinated by Tovin Ng'ombe.

Areas of computer usage, telecommunications, broadcasting, computer hardware and software, the Internet and its related para-ICT initiatives are also crucial for developing nations like Zambia

In this digital age, ICT gadgets are taking over the running of social economic and

political issues and countries that lag behind would reflect retrogression in these aspects.

In the last decade, Zambia has recorded a rise in ICT usage but the country just recently formulated a policy to guide and enhance the activities of ICT sub-sector, after sometime.

MIND's contribution in the process has been to make government and other stakeholders realise that ICTs could foster development and improvements in various fields such as health, education, agriculture and others; whereby enhancing the ultimate goal of eradicating poverty by empowering disadvantaged people /groups.

The challenge however, has been to ensure that the policy, that has been lagging behind the fast growing pace of ICT usage, especially in the area of Internet, is enacted.

“We played a role in submitting to the ICT Policy. Even if the submissions we made are not picked in their totality, we know that our contribution to the process will bring development,” said Mushingi.

Within the organisation, there was a drastic growth in membership from over 20 at formation to about 50 which included media personnel from rural areas and provinces like Copperbelt, Northern and Eastern.

The growth has had adverse strain on the executive, as it has proved difficult to reach members in far flung areas and teach the nitty-gritty of ICT's.

Through maintaining a mailing list where various ICT issues were discussed, invitations to meetings were done, media awards announced and international conference announcements posted, members got exposed to an array of ICT resources at local and international level.

“Some members have been to international conferences such as the Highway Africa Conference and the WSIS to learn more skills and others, including me and two other Zambian Journalists, Brenda Zulu and Ellen Chikale have won ICT and other related media awards. What is most important is that we are here to serve those affected in society. By exploring various dynamics of the information society, the public we are serving is becoming more enlightened,” says Mushingi.

She adds that there is knowledge spill over in ICTs since the member journalists who have access to ICT materials and other information are able to share it with colleagues in their media institutions.

She says when the impact of ICTs would reach people like farmers for them to monitor marketing and farming trends in the country, the nation would reach a level of competence and development through ICTs.

However, a lot other challenges lie ahead of the organisation. Ms Mushingi admits that there is more to be done than has already been done because a number of project concepts have not been supported by other cooperating partners.

Zambia has not been spared in the digital divide which separates nations that have fully developed their ICT usage against those whose usage has been limited by economic and social incapacity.

Within Zambia itself, urban and rural areas have a localised version of the digital divide. With the MIND emphasis to include journalists from remote places as

members, this has enhanced their participation in ICT development and realization of its intended objectives of ICT acknowledgement and appreciation by Zambians.

Digital Divide

The rural digital divide is the inequitable access to ICTs between rural and urban areas that separates those in rural areas from the world of information and knowledge resources. The rural digital divide is derived from a complex range of problems, including the lack of telecommunications and other connectivity infrastructure; skills and institutional capacity, representation and participation in development process and financial resources.

“There are various challenges and bottlenecks in the development of ICT in Zambia like in many African countries. The large part of rural Zambia remain cut out of the telephone network, with the 85 percent of available telephone network only serving the urban area,” said Mwila, the web content and eCommerce Specialist for ZAMNET Communication Systems.

He noted at the inaugural workshop that Zambia made its first major step towards the formulation of an ICT policy in 2001 when it held the first workshop on the National Information and Communication Infrastructure (NICI) Policy for Zambia.

Lloyd Himaambo, the former chairperson of MIND feels that MIND has lost its center, which holds its members together as a network. We are failing to define ourselves as an organisation. We take anything that comes our way and we don't follow them through, since we keep talking about ideas without following them up,” said Himaambo.

He says the only contract the network has ever had is the IICD project but it has not explored other areas as contained in the constitution.

He says the network has maintained loose members from media practitioners who have not been paying membership fees.

On the positive side, Himambo says the network has sold its existence worldwide.

He says since government is writing the 2006 to 2010 strategic plan and ICT is at the call of the plan, MIND should have been able to contribute to the process but only One World did so.

Floics Kasumbalesa, a founding member of MIND says the programme has been challenging in that membership has kept growing despite having had one initial workshop with Media Action International of Switzerland.

Mr Kasumbalesa looks forward to a new leadership which will ensure that journalists from rural areas are not only recruited but also empowered to have access to ICTs for the national linkage to be maintained.

“We have gone through a lot of phases as it has not always been rosy but the organisation survived and we are looking forward to a new executive that would include other areas more by training more journalists,” said Kasumbalesa

Brenda Zulu, who has been instrumental in bringing the members together, has since used the MIND model to establish other media networks in other African countries using the ECA platform where she was moderating a media discussion online.

“I would like these networks to receive funding at the end of the year and the ECA

should be serious. I am also looking forward to launching the regional Africa ICT4D Media Network this year. It was supposed to be done in Tunis during the WSIS conference but the change of leadership at ECA and the lack of translators at the conferences made it difficult to realise the dream,” says Zulu. IXP's to perk up internet services in Africa

Mushinge feels that there is still more that MIND has to do as challenges are more than the successes that have been scored in the four years of its existence. “But the little successes scored carried impact; we managed to spread the ICT 'gospel'” she adds.

She says she had to face a number of hurdles as a leader of the network as there were times when members and partners expected too much and had different goals from her. “It was difficult to satisfy the partners and the members at the same time,” says Mushinge.

She says her committee had hoped for constant training of more journalists in ICT issues but despite applying to organisations that support ICT issues in Zambia and abroad, the response was negative.

Other challenges include lack of accessibility by some members especially those that emanate from rural areas, who she says 'almost don't exist'.

She says some have to travel long distances to have access to expensive internet services, leaving them out of the discussions on the mailing list.

She said most courses in ICT are offered at conferences outside the country and the subject is not part of the college or university curricula.

The other hurdle, she says, comes from 'ICT illiterate' editors who have little interest in the new concept but would rather get stories on hot issues, especially politics. This makes it more difficult for freelance journalists who have to sell their stories to various media institutions.

At the end of the day, Mushinge says MIND is known everywhere and has more potential to be a dependable organisation that can do any ICT work and help in contributing to Zambia's development.

In the next five years, Mushinge projects a MIND that would have maintained the current partners and having garnered more support through a committed and passionate leadership as she intends to relinquish her position this year.

“We cannot rest and ignore the fact that the world is undergoing globalisation in which we cannot ignore ICTs. They are here to stay,” concluded Mushinge.

MIN D

ICTs help transform lives of rural women in Zambia



Journalists at a world conference key-in stories to their various media organisations, using the Internet.

*Photo taken by:
Glory Mushingwe*



By Glory Mushingwe

The women of Kalomo district, some 400 kilometres South of Lusaka are influencing and transforming the face of the district, socially and economically with the help of new technologies.

With support from The International Institute of Communication and Development (IICD) of the Netherlands and by Step Out firm, these women under the Kalomo Bwacha Women ICT club, are using the only and first resource centre of women in the district to improve other women's money making activities by using the internet to market their produce.

This in turn helps to increase their money base and therefore, the circulation of money in the

district. Kalomo is a rural district and is mainly dependent on farming as it has very few companies offering jobs to the indigenous people.

Kalomo's opportunities

The presence of the hospitality business in the area bears testimony to the fact that Kalomo has potential to be a good tourist attraction, if attention is given to it, as tourists tend to stop by in transit to the tourist capital, Livingstone, about 120 Kilometres away, to see such sites as the first Governor's house, a few kilometres from town, down the road that leads to The Ngoma National Park, about 25 Kilometres away from town, and also proceeds to The Kafue National Park.

The presence of these national parks and other historical sites and stories are interesting to tourists and some usually feel it's a good idea to stop by but the road is bad and there is no electricity in the settlements along that road. People who can afford solar panels have installed them as the many remain cut out from civilisation and adequate communication. This has also affected business in the area especially for women who depend on small businesses to supplement family incomes, especially in times when there is not enough food from farming, due to poor rainfall, which affected the harvest.

Bwacha women ICT club

To address these issues, Bwacha women ICT club based in the centre of Kalomo town, thought of marketing produce of the local area using the internet in order to make ends meet. The club generates between 1.5 to 2 million kwacha.

By that time, this dynamic group was being facilitated by Step Out firm already in the business of helping other women clubs that were affiliated to it, through dissemination of agriculture seeds. They would give the women clubs affiliated to them, 5KG's each of different seeds such as maize, groundnuts, beans, sunflower, etc, to plant after which the seeds would be returned in 50KG bags after a good harvest, hence that would act as a loan system. The seeds would multiply and revolve so that other clubs could also benefit. At the end of the day, women are enabled to have enough food in their households and to sell, thereby enhancing food security.

The produce from these clubs would also be collected by Bwacha women and sold at one centre, hence addressing marketing problems.

Applying ICTs

Step Out further decided to introduce ICTs to the group of about 11 women including an office assistant and sensitised them on how their operations would be enhanced with the use of communication facilities such as telephones, computers and the internet among other facilities and the need for a resource centre where the women could meet, share ideas and market their produce physically in one place and through the internet. This food has been purchased by World Food Programme, The Catholic church in the area, lodges and hotel owners, and the general public. Bwacha women club members consist of women who are about 48 years for the oldest and 38 years for the youngest. They are also in the

process of incorporating youths, especially that the youths were part of those that were trained during the basic ICTs and Marketing course. More training of youths is envisaged.

Last year, Step Out Coordinators, Edwin Zulu and Mildred Mpundu, introduced Bwacha group to IICD, which at that time was in the process of identifying local organisations that were ready to use ICTs in their operations, which they could partner with locally. IICD and Bwacha women club finally entered into an agreement, where IICD provided two computers, a printer, a digital camera, a cell phone and a landline, after which they were connected to the Internet through a dial up connection.

A local businessman, Mr Philip Mpundu who is the patron of the group offered a two-roomed building free of charge for the women to use as a resource centre. The group then launched the resource centre in October 2004 and called it the Kalomo Bwacha Women ICT club. Today the club has about 32 women groups affiliated to it.

According to Bwacha Women Vice Chairperson Gladness Kayuni, these clubs are now able to market through the resource centre and on the Internet, their produce which now range from food stuffs, clothes and crafts. Through, the Internet, the women at the moment are only able to sell the produce by interacting/corresponding by email with potential clients, some from neighbouring countries. In that manner, they write to them and talk about what their resource centre has to offer, as well as answering to their questions to that effect and if successful, they then arrange on ways in which they could carry out a particular transaction. They use the email directly to market their produce as they do not yet have a website where they could place their adverts.

"We are the mother bodies of all these 32 clubs! Now women in these clubs are able to market their produce on the internet through us. Apart from the mats, baskets and clothes, we also market packaged dry foodstuffs and vegetables such as Chibwabwa (Pumpkin leaves), Okra, Kanunka (black Jack), Beans, Early Maturity Maize, dry Cucumbers, etc," said Kayuni

Apart from email, the digital camera is also used to document information in picture format for sharing and publicity of their services and other activities.

The members of the general public also have access to the services by paying a small fee to have access to ICT tools. The fees that are charged act as a revolving fund to use for other needs and to pay a full time Office Assistant that has been employed.

"We use the money we get from the customers as a revolving fund to pay the secretary who we have employed to oversee the operations of the resource centre on full time basis. From the same money, we buy materials and sew Pit coats, which we exchange for grains such as maize, from villagers and then we sell the maize to organisations such as the World Food Programme. At the end of the day we use the money for other needs and also buy foodstuffs such as Kapenta and others, which we give out to the needy to curb hunger which has been perpetuated by poor rainfall," Kayuni further stated.

The grass-selling Lusime women in Mwiindilila village have since expressed admiration at the Bwacha project and expressed need for a similar set up in their area so that they do not have to travel to town all the time to access the ICT facilities. With the absence of electricity in the area, the women suggested that they would use a solar panel to connect to the internet and use one of the classroom blocks at a near-by primary school.

Bwacha Women ICT Club continues to be the link between these women clubs, other groups of the society and potential customers through ICTs.

However, Bwacha club also has its challenges. The computers at times develop faults and without proper technological know-how, the club always seeks the assistance of a computer expert from Lusaka who has to travel ten hours go-come and operate free of charge and is only given one way transport money to go back. "We always have to use one person because we do not want to change hands as that is what leads into destroying equipment," said Kayuni.

Bwacha women's training

So it came as a joy when the IICD through one of its training partners, Coldreed Communications sent three trainers to train the women and other members of the public on Basic ICTs and Marketing, where software skills and Computer maintenance were taught. "The course took three days and was able to enlighten them on how to handle little hiccups," said Violet Hankwebe secretary at Bwacha club. "We learnt on how to go about with computers and were able to even teach our friends. The course was quite helpful because now we know how to handle certain programmes of computers, some certain things, we can do on our own and not wait for someone to come and help us," she said.

She was however quick to point out that the course period was not enough as most of the women felt more time should have been allocated for the same. "We need more training, because there is a lot that we need to learn and three days was not enough. Those three days was just foundation, so we need another course."

The women also stated that the dial up system which they were using was very slow as it took about 10 minutes just for a page to open and usually customers got tired of waiting and would leave if they were in a hurry. They therefore called on other partners to come up and provide a satellite dish and a photocopier to help provide efficient services.

Developing livelihoods

The establishment of this centre has even increased the level of entrepreneurship for inhabitants of Kalomo as not only the affiliate members are able to benefit from the services but also the general public who are marketing their services on the net and in the building, such as reed and grass mats and baskets as well as clothes, food stuffs, etc.

Bwacha women is comprised of professionals, such as nurses, teachers and secretaries, therefore they operate in the club when they are not working. For example, on weekends when the office assistant is off, they take turns operating in the resource centre. Those that go to church on Saturdays sit in on Sundays while those that congregate on Sundays sit in on Saturdays.

The husbands of these women are very supportive all the way because they believe the development will benefit them and the communities they live in. One is able to see some of these women's husbands escorting them or helping where necessary with their wives affairs so that they are able to attend to the duties at the centre. As a visitor of the centre, you are treated with such good hospitality by these husbands and their families even when

you follow at their homes.

Looking at how this resource centre has improved people's livelihoods, other people are also emulating the initiative and already another similar business centre is being constructed with the help of a Canadian NGO, bringing to three the number of ICT service centres in the area.

The Kalomo District Council is excited at the development and called on other investors to establish ICT businesses in the area. "We need more investors to establish such businesses. ICT businesses could be good in this area, because Kalomo town is situated on the way to these tourist attractions so as tourists travel, they could stop by and access the ICT's," said Council Secretary Alfred Mungalu.

People travel from as far as Mapatizya (an amethyst mine area), about 120 KM from Kalomo town and other distance places to access these facilities and this is evident that the people in the district embrace ICTs.

Prospects

With such developments as the Kalomo Bwacha women's, it is clear; these women have lit a candle in the district towards a bright future. Where there once was lack of access and non availability of communication channels, people are now able to connect with other communities and market their produce and goods.

It provides hope that other people would take a leaf from this. It therefore also places a need for the Zambian government to speed up the process to develop the national ICT policy, so that it could give direction on how the country proceeds in implementing ICT related business. There is a lot lacking in this area, such as proper systems and infrastructure to support the enhancement of ICTs in the country, especially in rural and peri-urban areas.

Meanwhile, efforts that are being made to connect people by way of resource centres in this manner by local organisations such as Bwacha, Step Out and International organisations such as IICD should be well commended. For indeed, like the name Bwacha suggests, it is daybreak, we need to wake up and move ahead in ICTs with the rest of society in this information age, for it is the way to development.

MIND



ATM's have been recognised as a convenient and efficient way of banking in Zambia. With the new-high tech of ATMs interlinked, one can withdraw money from different banks.

Photo taken by:
Diana Mulilo

'Expensive' Computer Syndrome



By Chris Kakunta

As the use of computers and other Information Communication Technology (ICTs) equipment become increasingly necessary in communication, there is a growing worry among key stakeholders that corruption in procurement of this equipment may have devastating effect in sustaining the industry. Although there is no real evidence to attest to these sentiments, concerns in most organisations have been raised over corruption in the type, make and procedure in procurement of this equipment. In government institutions for instance, where this author has over a decade experience, procurement of any equipment, including computers is a jurisdiction of the Procurement Units (PU), who may not be conversant with ICT's

They scrutinise quotations, submitted bids and recommend which dealer is suitable to supply what type and make of equipment. In most cases, the requesting components give details of the most preferred dealer and the reasons for the , based on thorough needs assessment and advise from objective experts, but this is often ignored.

Documents obtained from the PU in the Ministry of Agriculture and Cooperatives on procurement from a named department read in part, "Please find attached three (3) quotations for the purchase of six (6) computers. We further wish to advise that Company A would be the right supply of the above goods because of the warranty and backup services."

After the tender process, company A was not awarded the tender and a company, which was not even among the three quotations, was given the tender to supply the computers.

The results of the tender award were imaginable. Substandard equipment were delivered.

Similarly, in 1999, the department of National Agricultural Informational Services (NAIS) with support from the United Nations Development Programme (UNDP) under assistance for the Agricultural Sector Investment Programme (ASIP) was assisted with amount of about 20,000 US dollars for the purchase of a digital video camera (DVCPRO).

Upon completion of tender procedures, a Panasonic DVCPRO camera was bought and only lasted for about six months.

Colleagues of mine, who opted to remain anonymous, complained that though the camera was of high quality and standards, it had no camera bag, tripod stand, batteries, external microphone and cables and had no warranty from the named dealer.

It raised a number of questions as to what was contained in the order for such important components to be left out. Therefore, when the camera got broken, NAIS had no one to run to.

Today, the camera remains packed in a card box and the story of how it was procured and the shortfalls remains a procurement syndrome never told- the cost of the camera, the impact it created on information deliveries to the farmers. Procurement experts however, argue that there are standards, specifications and procedures that are followed in every government purchasing process.

They argue that it's not always that the lowest bidder would be given the order, but that other factors such as price and quality based evaluations, including backup services are also considered.

These reasons are often used as defence when anomalies or complaints are raised about certain purchases.

Although individual departments that are the end users of this equipment recommend to the PSU about the need for certain suppliers to be given preference for such transactions, very little or no considerations appear to be made.

The reasons are obvious: "the Procurement Officers have the responsibility to procure this equipment and always support suppliers who have registered with them and have a common understanding to supply goods and services," said Davy

Simumba from the Zambia Agriculture Research Institute (ZARI).

The ZARI has just purchased some computers through support from the International Institute for Communication and Development (IICD) and their experiences in obtaining this equipment revealed some of the worries that pose a danger to the development of the computer world, and more importantly, the investment of valuable resources into using Information and Communication Technologies (ICT's), for development

According to Mr. Simumba, the Ministry of Agriculture and Cooperatives, under which ZARI falls, chose a supplier for their computers at US\$1300 rather than US\$900 computer as per the budget meaning they were well over the budget for computers, an indication of lack of accountability. The US\$9000 was based on the current average market price of a basic computer at that time.

He complained that because of these differences between the procurement and supplies unit and his organisation, it took almost six months to have the computers ready for use in the project.

ZARI submitted its specifications to PSU and included three possible suppliers of computers including one which was within budget. After sometime, a follow up was made to check on progress and PSU indicated that they had decided to go by what they called open bid.

This again took a lot of time and after this lengthy process of open bid, a participant of US\$1300 got the tender of supplying eight computers. It means the supplier with cheaper computers was not included among the bids. The earlier request submitted by ZARI was simply not upheld.

IICD Capacity Development Officer for Zambia and Ghana Saskia Harmsen says experience has shown that companies procuring equipment often go to South Africa to save on the investment costs, not realising fully the loss of guarantee, easy access to support, right caballing and other services that are essential, especially when organisations do not yet have a lot of experience with using and maintaining ICT equipment.

She argues that this often results in costing the project owners more money in terms of support and replacement than it would have cost to procure the equipment at official dealers with professional support services in Zambia.

In many cases, she adds, "apart from malicious corruption and its consequences often times, it appears that persons simply are not aware of the risks of not being diligent about procurement, since, procuring a pen is very different in terms of risk than procuring a digital scanner or multimedia personal computer or network installations."

Computer Society of Zambia (CSZ) President Milner Makuni says the initial costs of investing in ICTs is high and therefore persons or institutions intending to buy them must always consult experts before procuring.

"The CSZ has a general membership of experts that can advise people intending to buy ICTs and through this they are guaranteed of buying quality equipment backed by full backup services," Mr. Makuni said.

He said Zambia, having liberalised her economy has an open market where individuals are free to sell whatever product they have and the ICTs are not an

exception. He adds that the country has no law to protect individuals from being supplied with inferior equipmentl.

He says in most cases, factors such as unreliable sources of electricity, unskilled manpower handling the equipment, and general support and use of equipment is used as a defense for organisations supplying substandard equipment.

Zambia's potential in the development of ICT is relatively low and Mr. Makuni says:” We are just emerging and still have not yet utilised the value of ICTs and its added value service at individual and country level is yet to be fully exploited.”

In order to help sensitise the public against being cheated on ICTs, the computer Society of Zambia and Coldreed Training, an organisation that offers training on ICTs has been conducting workshops and seminars for users of ICTs.

They workshops are aimed at improving handling skills as well as some important aspects in managing ICTs for long-term sustainability.

Although the impact of these trainings are yet to be realised, there is surely corruption in the procurement of ICTs and for a country like Zambia whose ICT base and benefits are yet to benefit the greater masses, it is only prudent that individuals and institutions take precautionary measures to stop the on-going corruption practices in the industry. There is need for more public discussions on these issues, since if it is not exposed and the unnecessary costs and loss of added value provided by using ICT's are not more widely recognised, the situation is unlikely to change and continue to harm Zambian development.

Z
A
M
B
I
A

MINID



A lady marketeer discusses business from her cell-phone.
Photo taken by: Diana Mulilo

MIND



Patients, doctors and nurses have it easy with the first tele-health initiative that will ensure that the health system is inter-connected to cater for the ailing populous by making the healthcare system interconnected via special computers. **Photo taken by:** Diana Mulilo

Zambia's tele-health sector gets Boost

By Henry Kabwe

Zambia is poised to develop the first tele-health initiative in Africa that would ensure that the health system is inter-connected to cater for the ailing populous by making the healthcare system interconnected via special computers.

Strategically positioned as a pilot project, the Continuity of Care Project will commence its operation at the Kafue District's Nangongwe Clinic. The Presidential Emergency Preferential Fund funds the project for HIV/AIDS Relief (PEPFAR), which was introduced by United States President George Bush.

In most aspects, the system operates like a mobile phone since no formal connections is required to start it. When collecting the client's data, the health card is inserted in a mouse-like device which reads the information from the card.

"If a patient comes from Lusaka and goes to Livingstone, all their details will be downloaded without having to explain what they were going through earlier on. The doctor can easily get all the details from the health card and proceed from where the other health care giver left. This is a breakthrough in the Zambian IT health system and it will succeed," Masese said.

After discovering that there were disparities in the referral system for travelling patients in the country, the Central Board of Health (CBoH) in Zambia, initiated the project that would expand to other clinics in Kafue and some districts in Lusaka Province before covering the whole nation with health care that would only require a health card.

Before this initiative, patients had to carry documents to confirm that were referred or were sick in another hospital before personnel in the hospital in another district could attend to them.

Continuity of Care Project Team Leader Noel Masese says the programme will commence by incorporating ante-natal care before advancing to HIV/AIDS related ailments to avoid stigma and discrimination.

"If the patients go with the health cards to other health institutions they have been referred to, the medical personnel would know that these people are sick and are coming from another medical institution through the social computer," he said.

In Lundazi District of Eastern Province, Misheck Nyirongo has developed a project proposal to establish a Tele-health Centre and has been espousing his dream of taking the same initiative to his rural setting for a long time.

Nyirongo said the initiative had not yet been funded and hoped that rural areas would benefit from the Continuity of Care project under the government's CBoH

since they are the most disadvantaged in terms of distance to hospitals and clinics, bad roads and lack of adequate transport.

“However, the information communication technology in rural areas is not that advanced. It will be difficult to get the initiative here and it is expensive to get equipment involved,” he said.

Nyirongo added that most rural health institutions do not give proper referral documentation to patients for them to be properly cared by bigger institutions because semi- or unqualified personnel run the health institutions in rural areas. Lundazi, which is over 800 kilometres from Lusaka, the capital city of Zambia, has glaring problems in access information and communications technologies like the internet.

A local internet café charges about K1 000 (US\$4.7) for browsing the net per minute while people in Lusaka, pay ten times less.

The distances between villages and health centres have exacerbated health problems while the road network is so undeveloped that it gets impassable during the rainy season.

However, the Continuity of Care project which was commissioned in Kafue District on May 3, 2005, will begin from districts along the line of rail because they hold more people than the rural areas.

Masese said the rural areas do not experience the problems being encountered in terms of HIV/AIDS statistics and opportunistic infections like tuberculosis (TB). “If you cater for Lusaka, Kitwe and Ndola, you have catered for half the country. The urban areas experience most TB problems and Anti-retro viral therapy is mainly being provided in urban areas,” adds Masese.

The five year PEPFAR funded project would see medical personal trained to operate on laptops. The database was developed under the CBoH in conjunction with United States computer experts.

Masese explained that the system does not require any telephone line connection, or VSAT or the Internet, to be logged on; all it takes is a mouse-like modem that is plugged to the laptop where the health personnel can download a client's data from the health card by touching the screen on a specific command requirement.

Masese demonstrated the system by touching on the client's details where a name was not clear and the laptop gave options by a simple touch through the database. The system requires health clients to use a health card which looks like, but is slightly bigger than, a mobile phone SIM card with a similar metallic attachment from where the data is retrieved.

What necessitated the project were the problems that the healthcare delivery system had in the nation before government's CBoH approached United States' PEPFAR for funds.

With the health card, which has unclipped information which cannot be erased in another software, a patient or client is assured of accurate information. The health cards also provide 'insurance' in that it cannot be spoiled by water.

“This card can drop into water and not get destroyed,” adds Masese.

He said before commencing the exercise in Kafue District which is about 60

kilometres from Lusaka City, a baseline survey was conducted in the peri-urban area and the residents gave various advantages and disadvantages of the tele-health system.

“The fears were that people risk losing the cards and we challenged them as to whether they easily lose their ante-natal books and they told us that they don't. We then concluded that they would still be able to keep the cards; after all, the health cards don't easily break up when folded and even if you put it in water, it can still be read unlike books which can get damaged,” he says.

Masese said the area was heavily sensitised about the system through the baseline survey and the training that was offered to all health personnel scattered across the 14 clinics in Kafue.

The training madet medical doctors, nurses and other para-medical personnel to understand the usage of the lap tops for them to cater for the patients from any card-carrying clinic in the district.

Staff in the Kafue District Health Management Team (KDHMT) has also been trained to continue refreshing the nurses and doctors on their night off duty days using the central inter-connectivity machine based at the KDHMT office in the district.

The cost effective initiative poised to run for five years is positioned to contribute to the efforts to bridge the glaring 'local digital divide' in the health system between the rural and urban areas

The CBoH remains optimistic that the tele-health initiative would provide sustainable and improved services in the nation where a lot of bureaucracy and inefficient services have been experienced for many years.

In Chama District which is 300 kilometres from Lundazi District, Equity Gauge of Zambia (EGZ) Chairperson Nelson Mtonga remains hopeful that the tele-health initiative will be extended to his area.

“We have many problems in travelling and we don't have many health workers at our local clinics. Many pregnant women have ended up giving birth on the way to the health centres because of lack of balance in the delivery of health services,” he said.

The Equity Gauge of Zambia which operates under the Centre of Health, Science and Social Research (CHESSORE) had been advocacy for equity in the delivery of services in Zambia.

It had started four projects in Choma District of Southern Province, Chingola District of the Copperbelt Province, Lusaka Province and Chama District of Eastern Province where surveys have indicated a number of disparities in healthcare between rural and urban areas.

Neighbouring countries like Botswana, Zimbabwe and Namibia have banked their hopes of introducing the system in their own countries after seeing its progress in Zambia.

Email: kabwehen@hotmail.com

MIND

IXP's to perk up internet services in Africa

By Glory Mushingie

The term 'Digital Divide' is one that has become common. It is commonly known and felt world-widely and also seen as one that defines the reason why some parts of the world are lagging behind in development. It is this same term that has necessitated the powers that be in the world to come together and strategise on ways in which they could address it and its effects; hence the introduction of such programmes as the just ended World Summit on the Information Society (WSIS), (which had its second phase in November 2005, in Tunisia), as well as other projects that we continue seeing being established more often than never before in the history of the world.

This term refers to the technological gaps that exist between the developed countries referred to as the Countries in the north and the least developed countries referred to as the Countries in the south. In this context the 'Digital Divide' refers more to the gap that exists in as far as communication and access to communication is concerned.

The world has agreed that people's lack of access to communication has affected their development as they remain in the dark about the happenings in the world, causing them to miss developmental opportunities such as education, employment and exposure amongst other benefits that come with adequate communication. With technology advancing at a fast rate in this era, we find a situation where communication avenues are becoming even more complicated. People are switching from using traditional ways of communication to modern ways, which are supported and transformed by new Information and Communication Technologies (ICT's).

One could describe New ICT's as non-traditional communication tools that are being used around the world such as computers, faxes, telephones and other technological communication tools, to acquire, store and disseminate information. Another necessity is for organisations outside the US or Europe to reap similar benefits in improved efficiency and reduced operational costs that have been achieved by the use of ICTs to support their work.... Whether people want it or not, this has become the way to reaching the world.

There is therefore a growing need around the world for people to be connected and have adequate access to communication through the use of new ICT's.

However, this dream is still far from being reached as some parts of the world such as Africa are still faced with so many challenges in this transformation to an



Fast and favourable Internet services come with a high tech satellite dish.

Photo taken by: Diana Mulilo

information era.

The poverty levels have created a situation where most rural parts of most African countries remain disconnected from the urban areas, thereby creating an internal digital divide between the rural and the urban areas in these countries. Most people are illiterate and cannot use computers, some can not even read! Most are impoverished and cannot afford to pay for the use of computers/internet, there is inadequate infrastructure and most places have no phones or Internet accessibility; among other reasons.

But still, even in urban areas where a good number of people can afford to use ICT's, others opt to shun them as they still remain expensive and the people that are forced to use them are those that really depend on ICT's for their day to day activities and living.

It therefore comes as a relief to observe that some segments of society have not only noticed this problem but have decided to do something about it.

Very soon, in countries such as Zambia and hopefully later, most parts of Africa, paying too much for Internet accessibility will be a thing of the past, as the tides would have turned.

Some International organisations have agreed to put forces together in answering to the above mentioned challenges, regarding accessibility to ICT's SIDA (Swedish International Development Agency), in collaboration with CISCO (Cisco Systems) and DFID (UK Department for International Development) have decided to financially back a local initiative where three internet Exchange Points (IXP's), would be established in three African countries.

The three countries are: Zambia, Malawi and Burundi who will work in corporation with local stake holders to enable the exchange of local (internet) traffic to be done in Africa and improve the services, as well as reducing the expenses.

IXP's are points that are established to facilitate the exchange of local (internet) traffic

The IXP reduce cost spent on expensive international links and are also able to increase the speed and general performance of Internet connection in the countries where they have been established.

The primary goal of this programme is to design and implement the I X P's in these countries and train local ISPs (Internet Service Providers) in BGP (Border Gateway Protocol) and management of the IXP.

A secondary goal of the project is to research on existing infrastructure that could be used to establish national research and education networks (NREN) and suggest a road map to NREN and Regional Research and Educational Network (RREN) establishment.

The project, which will be called 'African IXP's', will be maintained by different organisations based in these countries.

To own and maintain the IXP in Zambia will be The Internet Service Provider Association of Zambia (ISPAZ), an independent body and voluntary association acting in the interests of Internet Service Providers (ISP's) in Zambia.

ISP's are organisations that deal with matters related to the provision of internet access in countries. People who want to have their computers or phone lines connected to the Internet, do so by applying for that service and paying for it through such organisations. In Zambia, ISP's include such organisations as Zamtel, Zamnet, Microlink and UNZA.

The ISP AZ has a committee comprised of people from different ISP organisations in the country.

ISPAZ chairman, John Munsaka said the location of the IXP in Zambia would have to be agreed upon by the association once the project is ready, soon.

"The location will most likely be at Lamia house or one of the ISP's location," he said

The Malawian IXP will be owned and maintained by The College of Medicine (COM).

Opened in 1991 as a fifth constituent of the federal set up of the University of Malawi, the COM is situated in the commercial city of Blantyre in the Southern Region of Malawi. It has the biggest computer network among the constituent Colleges of University of Malawi.

According to the concept document of this venture, the African continent with 53 countries has only 13 Internet Exchange Points (IXP) while the rest of the countries continue to exchange local traffic through international VSAT (Very Small Aperture Terminal) and fiber links.

The document further states that "Due to lack of IXPs in most African countries, the African Internet Exchange Point Task Force (AFIX-TF) was established.

AFIX-TF is an operational team of African Internet Service Providers Association (AfrISPA). The objective of AFIX-TF is to accelerate the uptake of IXP's in Africa through training and awareness. KTH (Royal Institute of Technology), through its IXP-SIDA funded programme has combined efforts with other initiatives, such as, the AFIX TF-DFID-funded Catalysing Access to ICT in Africa (CATIA)-programme and the Network Startup Resource Center (NSRC), with the aim of deployment of IXPs in Africa. Cisco has declared an interest to donate parts of the equipments necessary for establishment of the IXPs in Africa".

If this project is successfully implemented, local stake holders would have an Internet exchange point, keeping local traffic local and improving their quality of service." The ISP's would be able to cut down on their operational costs, such as those that are currently being spent on international links like the VSAT. This would result in to them charging less to people who want to have internet connections. They would also be able to deliver efficient internet services to their clients.

In turn, internet users who pay for internet services would be able to retain value for their money, by accessing more internet links in a shorter time and paying less for it, than is the case now. Currently, people pay too much because the internet links take long opening, leading into over spending, as the client would have used more time on the internet and is charged by the minute, for the use of the facility in internet café's.

With IXP's the flow of internet traffic will be direct, and not having to go through international links via VSAT, hence efficient, as the links will be opening faster from the internet.

This project will incorporate seven students from the three African countries and Sweden, who also have benefits to reap from it.

"The benefits to the students would be in depth experience of Internet Exchanges and BGP which constitute a crucial element for the scalability of the Internet, experiences from working in international teams as well as from a complete project cycle, and an exotic traveling experience and insights in new cultures," said Munsaka.

All the parties involved, would have to undergo prior training and planning. Amongst the activities indicated for the programme which was planned to start on 16th January 2006, are student's learning programme about Internet exchange technologies and relevant technologies related to the optional services to be supported.

They will learn about designing and implementation of the Internet exchange choosing the topology that is most suitable, research on ICT infrastructure that could be used to establish NREN and suggest a road map, conducting BGP training for the local participant students.

Also part of the activities will be, documentation and planning for training of administrators, as well as organising of the AfriSPA - DFID workshop in Burundi, for 1st and 2nd April, 2006.

The activities that would follow, from 26th March to 14th May 2006, will include the deployment and testing of the Internet Exchange, organising of training for all the ISPs to make them ready to get connected to the IXP, formulating an agreement for the ISPs and that of the IXP hosting policy and agreement.

Other activities would be to connect as many ISP's as possible, training of administrators, documentation and launching of IXP and handover to the ISPAZ. The Zambian government, working in collaboration with ICT stakeholders from both the private and government sectors is still in the process of developing a National ICT policy, where part of the objective is to work in partnership with all stakeholders in coming up with and implementing workable strategies of enhancing ICT's in Zambia.

With the involvement in this project of such government wings as UNZA and Zamtel, among others, it gives an indication that the government welcomes initiatives such as this and is ready to create an enabling environment for its establishment.

Government's commitment to this initiative is reflected on page 57 of the first draft of the national ICT policy as follows:

"To promote the expansion and growth of internet services in Zambia, the government through the ministries responsible for ICT portfolio in conjunction with the regulator and internet service providers shall facilitate the formalisation of the existing Internet Exchange Point arrangement in Zambia, to be operated in the interim, by the public PSTN operator on such terms and conditions agreed upon

by all licensed Internet Service Providers in the country."

Zambia could draw lessons from countries such as South Africa, Botswana, Mozambique, etc which have established IXP's.

These countries have so far managed to keep their costs to internet access relatively low, as they are able to exchange mail within their own domain.

Munsaka suggests: "In Zambia we take long to implement things. We as a country should not wait to implement such good initiatives. We should not wait for these barriers, policies, etc. this requires these support of the regulatory system."

If this project would help ISP's cut down on costs, as envisaged by the implementers, then, it could be expected that the expenses of individuals to access internet would also be cut down.

This would be a welcomed move, as more people would be empowered with access to information and the capacity to share it, as that is the whole purpose of the efforts being made by these, the ICT stakeholders, in pursuit of making the information society as inclusive as possible

MIND



The **Zambian Chawama Youth Project** brings life skills to local youth and women through ICTs

By Mwiika Malindima

Situated in the heart of Lusaka's Chawama Township, the Chawama Youth Project has purposed to change the lives of youth once dormant into viable self-reliant and respectable people.

Chawama Township houses many thousands of people of all ages and origins. The biggest sum of Chawama's population is youths, most of which are unemployed and poor. With Zambia's economy in its dull drums, there is little that the government can do for them. The government is equally constrained with so many unfinished programmes. If the youths do not stand up and do something for themselves, no one will come to their rescue.

This is a story of youth that have *raison d'être* to bring change to their lives and therefore to the lives of others in Chawama. It seems they are bringing to life the adage that says "those that bring sunshine to the life of others cannot keep it from themselves."

Introducing life skill

"We realized that there is rampant unemployment among the youth of Chawama Township. This forces a lot of them into avoidable activities such as prostitution for women and crime for men. So we decided to come up with the Skills Training Centre to give them life skills. This would help them get employed and or be self employed and do something with their acquired skills," said Rodgers Mulenga - Chawama Youth project coordinator. Chawama Youth Project and Skills Training center has since its registration in 2001 trained over 300 people in different fields that include carpentry and joinery, tailoring and design, welding and metal fabrication, auto mechanics, house wiring and power electrical among others.

The Skills Training Centre has not relented but has become ambitious in exploring new Information Communication Technologies (ICTs). It recently put in place an ICT center that would enable youths and other clients from the local community to access the Internet and other computer-based secretarial services easily. "After undertaking some training in computers at Microlink and supported by IICD, we felt it necessary to have an Internet café in our premises. We approached an organisation called Step Out, which linked us to IICD's Small Initiative Fund (SIF) support programme. IICD provided start-up support in the form of two computers, a scanner and a printer, and also helped us to get connected to the

The youth project has become so popular not only to the youth but to all people in the local community and even to people that come from places fetched 15 kilometres away to access the services it provides.

Nicolas Bwalya who is the ICT instructor at the Skills Training Centre says the ICT centre has become small to cater for the demand for its services. "We are being overwhelmed every day by people that want their letters, proposals and other documents to be written and printed for them. We also have a lot of people coming to use the Internet facility and send emails," he observed. Bwalya further noted that there was need to refurbish the ICT centre with more computers that were connected to the Internet and also to increase the number of printers and scanners so that customers would not have to be turned away due to lack of capacity to serve them.

Director of Chawama Youth Project Justin Somi noted that the projects new and viable section of the ICT centre was a very necessary augmentation to its activities. "We have started offering lessons in computer skills and how to use the Internet to our trainees. This is important to them because we are in the age of information technologies and most businesses now use IT in one way or other," he said. Somi further added that the local community was also being trained on how to access the Internet and use the information for their benefit. He said they were being trained in using the Internet to communicate with friends and relatives abroad. They were also using it to learn of new business opportunities and of scholarships. He said the trainees are also exposed to such trainings as proposal writing among other skills. "It was very difficult for many members of the community to access the Internet and send emails conveniently in the past. People needed to travel to town and spent a lot of money in order to send an email or to have their letters and proposals done. The ICT centre has changed all this by bringing these facilities closer to home," observed Somi.

Training on proposal and report writing formats from the Internet has proved most effective and draws a lot of people to the centre. These skills help the trainees' source funds for the various projects that most of them carry out around their communities.

Interconnecting rural and urban youth

The Youth Project has not relented in its ambitions to expand their horizons even further. They want to become an interconnecting centre for rural and urban youths in cultural and tourism exchanges. These measures are aimed at equipping the youth with skills that would help them for the rest of their lives. "Our vision is to set up a youth tourism centre here that would expose our activities to the rural areas and also help them have life skills that we offer. We also plan to use the ICT centre to connect us with others and introduce cultural exchange as part of our diversification programmes. These ICTs will really expand our spectrum and expose us to a lot of information that is important to our development, for instance we are also learning new skills such as desktop publishing that show us how to make cards for different occasion like weddings. We sell these cards in order to make some money for the development of our centre" Somi further noted.

The coordinator of the project Rodgers Mulenga however noted that they face a number of pullbacks. "We are currently using dial-up-link to access the Internet, this is proving a bit

expensive. We have to pay for the line at ZAMNET and also for the phone lines with ZAMTEL," he said. The ICT centre offers its services at very minimal charges to the local community in order to sustain the equipment and pay the instructor who also looks after the ICT centre. This also helps cushion the service bills from ZAMNET and ZAMTEL. Sustenance of the project also comes from profits from sales of the furniture and tailoring materials that trainees in other skills produce. "The ICT centre has also started burning CDs which has become a viable business in Zambia. We receive a lot of requests for these services but we can only do so much because we lack the capacity. We have only one computer that can burn CDs. With a few more such computers and with this high demand for recording, we plan to go into music recording. This will be more profitable and help us sustain the project even better but we need that technology to start with," Mulenga observed.

He noted that Zambia has in the past few years seen an increase in the music business with a lot of youth getting into it. "Most youth from Chawama are interested in recording music albums but they have nowhere to do it within the community. This forces them to go to far places for their recording where the charges are too high," he said. The Chawama Youth project wants to ensure that youth from the local community participates and benefits from the booming music industry by providing them with affordable music recording facilities. This measure would bring them some income through proceeds from record sales, which would contribute to the further expansion and sustainability of the project.

Innovations

The ICT centre has innovatively been producing calendars, wedding cards, business cards and others to add to its sustenance. As part of its IICD's support, the Youth Project recently obtained a digital camera that facilitates the provision of such services. The Chawama youth project and Skills Training Center has brought skills and a new lease on life to youths and women of Chawama indeed. But as viable as it is, it could do even better with more technological capacity.

"We are currently looking for people that can support us to have our own wireless link to the Internet because this will save us a lot of costs through line and telephone bills. With a few more computers we can also have more access to the computer and be able to share them with clients because now we do not have that capacity," the project coordinator added. The Chawama youth project is indeed viable because it brings skills to youths and women that help reduce poverty, remove them off the street and from prostitution. It offers them skills that they could use even if they were not in formal employment. This is what sustainable development is all about.

MINID



WIDnet is building a clearinghouse of information on women and gender initiatives in Zambia

By Lloyd Himaambo

The battle for women and girls empowerment has been going on for a considerable while in Zambia now. As such, a deluge of data and information pertaining to women and children's human rights, gender equality and equity, economic and social justice, democracy and good governance, HIV/AIDS and reproductive health, and gender based violence exists. This is because *the women's movement has scored major successes in its effort to empower women as a strategy to attain national development.*

What however has been lacking is the coordination of information regarding their work. This has many a time led to duplication of efforts, funding for data collection when such data already exists in another 'partner' organisation. In sum, access by intended recipients and other interest groups or individuals such as researchers to such relevant material has been very minimal. But thanks to Information and Communications Technologies (ICTs) this is set to change. And in fact the tide is already turning.

'The information gap was noted in 2002 at a workshop in Siavonga by women NGOs but also attended by parliamentarians,' explains Millica Mwela, the programmes Coordinator for Zambia Alliance for Research and Development ([ZARD](#)). ZARD, a project partner of IICD, is one of the oldest Non-Governmental Organisations (NGOs) in Zambia. It was established in 1984 and derived its concept from another NGO that existed in the mid and late 1970s called Social Economic Research Group.

Mwela explains that due to this information gap, information collected among and by women movements does not reach the target audiences. ZARD has come up with an ICT programme called Women's Information for Development Network (WIDnet) to close this gap. Mwela explains that 'the WIDNET programme which is spearheaded by ZARD started in 2004 and will run for five years under the support of the International Institute for Communication and Development (IICD) of The Netherlands.'

The women's Information for Development Network

The women's Information for Development Network (WIDnet) programme is an Internet portal/hub for information on women and girls in Zambia which uses ICTs as tools for

information generation, collection, analysis, coordination, storage and dissemination. It is a ZARD Information, Advocacy and Capacity building Programme for women's and children's human rights, gender equality and equity, economic and social justice, democracy and good governance, HIV/AIDS and reproductive Health, and gender based violence. WIDnet is a strategic direction to enable women and the community at large to access information for development. It is a leap in the direction of bridging the information gap that had been created.

The Initiative came about at a workshop dubbed 'Can ICTs make a difference' organised by the IICD with the help of Zambia Institute of Mass communications ([ZAMCOM](#)) and the [e-Brain](#) forum of Zambia. The round table workshop was held in the southern province town of Siavonga in 2002. At the same workshop, participants recognised the need for a network to be established between parliament and the women's movement. It was understood that for parliamentarians to better represent women, there was need for them to have first hand information on the status and situation of women in Zambia through this network.

The programme is conceptualised to collect and disseminate information and knowledge to the women's movement, civil society organisations, Members of Parliament, government departments, media, learning institutions, communities and individuals. It further aims at building capacities of target groups in women's organisations to enable them access and use ICTs effectively in planning and executing their development and research activities. It aims at acting as a interaction forum with policy makers particularly MPs and will enable women and the community at large to access information for development.

WIDNet is targeting women's organizations and Parliament. The selection of participating organizations is based on NGOs that are dealing in topical issues of concern to the women's empowerment, that is to say, those that are in the fields of Micro-Credit, entrepreneurship, poverty reduction, Women's Human Rights, Women and Health (HIV/AIDS, Reproductive Health), Girls and Women's Education, Violence against Women, Decision-making, Widows and Orphans, and Agriculture and Environment. The other criteria for selection is based on NGOs with a large membership and working in other parts of the country including rural areas, thus increasing the potential to reach out to many women and men in urban and rural Zambia.

NGOs participating in the programme are: Women Entrepreneurs Development Association of Zambia (WEDAZ), Zambia Alliance of Women (ZAW), Women for Change (WfC), Society for Women and Aids in Zambia (SWAAZ), Zambia White Ribbon Alliance for Safe Motherhood (ZWRASM), Young Women Christian Association of Zambia (YWCA), Forum for Women Educationist Zambia Chapter (FAWEZA), Girl Guides Association of Zambia (GGAZ), Justice for Widows and Orphans (JWO) and the National Assembly. So far, ZARD has signed Memorandums of Understanding with eight organisations and is yet to do so with National Assembly and FAWEZA.

A radio mast was erected at the ZARD offices to make possible the information sharing via a Lusaka-based Internet service provider (ISP) as it receives and sends signals.

Five computers were purchased to strengthen the WIDnet secretariat at ZARD and three of these computers are meant for Information Technology (IT) training at the resource centre. Six computers were purchased for partner organisations.

During the needs assessment, four partner organisations indicated a need for a computer

for the electronic information exchange. These computers are to be used by the organisations information Officers who are the organisations' information gatekeepers. The computers were given to ZAW, GGAZ, YWCA and WEDAZ in March, 2005.

ZARD has already started working with partner organisations in managing their information by setting Information corners.

According to ZARD programmes Coordinator, Mwela, ZARD has begun offering IT support and training for staff at partner organisations, their target groups, as well as women and girls. ZARD is also to cover Internet connectivity costs for all partners and a usage fee for a specified period. This is aimed at enabling the Information Officers interact effectively within the WIDnet programme.

Under the WIDnet project, an interactive website will be created and possibly launched by the end of August 2005, according to Mwela. Partner organisations in the WIDnet are expected to upload (put) their materials on the website so that other partners, individuals, policy makers etc can access and know what they are doing.

Girl Guides Association of Zambia

Girl Guides Association of Zambia (GGAZ) is one of the participating organisations in WIDnet and it is one of the partners that have already received a computer under the programme.

Ms Linda Chiumya is the programmes Officer for GGAZ and also the person attached to WIDnet on behalf of GGAZ. She looks forward to being trained on Information Technologies under WIDnet and is confident that the WIDnet website will be very beneficial. She says her organisation has in store a wealth of material that could be beneficial to their members and public at large if only it was easily accessible. She explains that currently her organisation was depending on personal delivery of literature. She says the GGAZ headquarters is connected to the Internet but access is limited as only two computers are connected thereby making officers 'queue' for Internet.

Chiumya says: "once the GGAZ materials are uploaded on the WIDnet website, access by our more than 20 000 members will be enhanced." She is of the view that even GGAZ staff will benefit by way of accessing information about the work of other organisations.

ZARD coordinator Millica adds: "At the successful completion of the project, there will be created capacity among groups of disadvantaged women and girls in Zambia to use ICTs effectively to enable them access information, communicate and network for social-economic empowerment, gender equality and equity, social justice and transformation."

She further says it will lead to effective information dissemination and efficient coordination of the hub to lead to better identification of cooperation possibilities and more effective implementation of individual organisations' empowerment activities.

More on this:

Email: zardwidnet@microlink.zm

MIND



Farmers' Internet cafe in Zambia

By Chris Kakunta

In the last seven years, Medalido Makombe has been struggling to find spares for his boom sprayer. Fortunately, his spares are now on their way from India to Makombe farms, about 45 Kilometres south of Kabwe.

Medalido is among the few privileged farmers that have been browsing the Internet to get information on various issues affecting them as farmers.

The Farmers Internet Café, hosted by the Kabwe Farmers Association was established by the Zambia National Farmers Union (ZNFU), through support from United States Agency for International Development (USAID) and the USA's department of Agriculture through the Education Development and Democracy Initiative (EDDI) programme.

The basis of these projects, observes ZNFU deputy Executive Director ZNFU Ndambo Ndambo, was to link the mother body with affiliates at district level while at the same time providing access to information to individual union members.

Mr. Ndambo said: "We initially wanted to build the capacity of our members in this new technology so that they can be writing e-mails to us directly if they wished and also inquire about the various services that the ZNFU is offering to the members."

"Our members have benefited greatly," he said: "For instance, farmers were able to compare the prices of Tobacco in Malawi, Zimbabwe and Zambia on the Internet and through this network they were able to negotiate for a better price."

"The first reason we accepted this project as Kabwe Farmers Association was to make money for our association and secondly, to give farmers affiliated to the association a chance to access information cheaply," said Sven Pihlblad, Farmer and Project Coordinator, adding that the association also concentrated on providing agricultural information such as marketing.

Mr. Pihlblad said though the Internet is new and most of the information available was coming from the developed world, much of it is complicated and not relevant to the local situation, there were countries that were emerging like India that are able to provide information at small-scale level.

In Kabwe, he said, most farmers were looking for technology to improve or to add value to their products. He added that they were looking for Information on equipment like hammer mills, oil expellers, and spare parts.

"They are also actively looking for partners to assist them to develop. They are looking for

information on people to network with, to get good prices on their products and to get viable capital for their projects,” he said.

Agri-business experts say farmers need information to improve their production. “Without information”, Precious Hamukwala says, “we cannot go anywhere and let's not neglect these rural farmers. They need technology so that they can improve their production, purchasing and marketing decisions. They need to be connected with the rest of the world.”

With the two pilot projects, farmers are able to know who is selling and who the potential buyer is. They are able to know where the buyers are and at what price on the market.

“This worked out well,” Ms. Hamukwala who was also the Project Consultant said, adding that during the assessment, farmers were complaining of briefcase buyers who were setting their own market price yet the price of maize elsewhere was better than what the dealer was asking for.

Apart from accessing business opportunities, the farmers were able to know general marketing trends in the agricultural sector, they were able to write letters to their relatives as well as enquire about any other services that the union or any other organisation of interest to them was offering.

“We are happy when the farmers come as a group to request for specific information and our Internet personnel are on hand to help them,” Mr. Pihiblad added.

The Kabwe Internet café has provided income for the association as well as enabled it to diversify their business activities.

To operate profitably farmers pay K500 per minute for using the Internet. The public is also allowed to use it at the same rate.

The Café in Kabwe is able to generate over K3 million per week. Mr. Pihiblad said. This, he said, was sustaining the operations of the centre.

A survey conducted prior to the establishment of the Internet Cafés in Monze and Kabwe by the ZNFU among farmers revealed that, though the technology was unfamiliar to most farmers particularly women and girls, they were ready to embrace the technology as long as it was able to address problems such as sources of inputs and markets for the produce.

The survey also revealed that men, unlike women, were able to access information from various sources, through interaction in places such as bars, where women rarely go.

In addition, the survey showed that they needed marketing information on the Internet particularly on maize because it was the most widely sought commodity.

However, the introduction of the technology was something unusual to most farmers, hence the need for some basic training for the beneficiaries.

Ms. Hamukwala describes the initial stages as having been an exciting moment for the farmers; a mixture of fear and ignorance.

“I trained three groups and out of these, the youths were more receptive to the technology and were quick to understand and use the Internet,” Ms. Hamukwala said.

One of the lessons learnt from the project was that farmers were receptive to the technology, as long as the benefit was explained to them.

Ms. Hamukwala said: “If there is to have massive campaigns, it should be focused on youths and young people with some ability to read and write because they can actually pass on the information to the elders.”

She added that today's children receiving Internet training were the farmers of tomorrow and this meant that there shall be farmers who will embrace ICT and be able to benefit from it.

The results of the free 18 months project also showed that while the Internet communication technology has been in Zambia since 1994, farmers especially small scale ones have had no opportunity to it.

Recent statistics show that there were over 50,000 Internet users by 2004 compared to only 250 in 1994.

The Zambia National Farmers Union is determined to strengthen communication between the union and its members by ensuring that they provide communication equipment to farmers.

To this end, the ZNFU intends to introduce radio communication links in selected Farmer information centres.

“Introduction of radio communication systems in some selected parts of the country would work for the benefit of farmers. More centres in Solwezi, Kasama, Mansa and Choma would be connected soon through support from the Norwegian government,” said Ndambo

The union has sourced over 75,000 Euros for the expansion of the communication project that will facilitate smooth flow of information between the union and its clientele.

One key issue that needs to be recognised is that the internet must be reliable, as any forms of interruption will discourage regulars and would-be users.

The absence of reliable sources of power, establishment of solar panelled computer systems would be ideal, and this would in turn help rural communities where electricity is unavailable.

“ If farmers come to the café and found that it was not working, they would assume it will never work and this means they will never come back to the centre,” said Ms. Marjorie Habasonda, a Communications Expert with Participatory Ecological Land Use and Management (PELUM) in Zambia.

PELUM is a regional non-governmental organisation that is also trying to promote and advocate for the use of ICT among farmers.

Firstly, Ms. Habasonda adds: “There should also be a massive awareness campaigns before the establishment of the café so that farmers can appreciate the technology.”

The Internet is no doubt an important tool for development but it should not be used in isolation with other traditional media, observes Ms. Hamukwala.

It should be used in combination with, for instance, newspapers because of the limitations, which developing countries have, such as poor infrastructure.

In combination with other media, we can reduce the communications barriers by printing information from the Internet or publishing it or broadcasting it through radio.

In cases where farmers are illiterate, there is need to translate information on the Internet or there should be an information extension agent available to help access information and pass it on to them.

With low literate levels among most farmers, Ms. Habasonda recommends that it would be appropriate for websites to be in local languages or probably devise a translated version of the content on the site.

ICT is key to agricultural development. Without fast flow of information especially now that the country has liberalised its economy, it will be very difficult to compete favourably in a liberalised sector.

Farmers need to have information at the right time and in the most affordable way. The Internet is the cheapest form of ICT, and though initial installation cost is high, it still remains the cheapest mode of information dissemination.



Spreading the impact of community radio stations across Zambia

By Machova Musanshi

The emerging of advanced information and communication technologies (ICTs) such as computers, radios, mobile phones and TV sets can be seen as an answer to addressing some of the challenges that have continued to hinder development in rural communities. Since the liberalization of the Zambian economy and the subsequent liberalization of airwaves, more than 10 years ago, Zambia has witnessed an increase in Community Radio Stations being set up. These now spread across the eight provinces of the country except for North - Western province.

Community Radio

Although there is no clear definition as to what constitutes a community radio station, there are more than ten radio stations that have been branded under community radio, namely Radio Icengelo of Kitwe town on The Copperbelt province of Zambia, Radio Maria In Chipata, Eastern province of Zamba, Radio Chikuni in Monze, Southern Province, Radio Mazabuka in Mazabuka, Southern Province and Mosi-o-Tunya radio in Livingstone, The tourist town of Zambia in the South. Others are Radio Lundazi in Lundazi, Eastern Province, Yatsani Radio in Lusaka, the capital city of Zambia, Petauke Explores and Pasmе in Petauke, Southern Province, Mpangwe, Radio Mukushi in Mukushi, central province and Radio Mano in Kasama Northern Province.

All these radio stations broadcast within the range of 50 to 150 Kilometers and evidently cover all the corners of the country which consists of a total population of about 11 million inhabitants. However, some people have their own definitions of Community radio stations and have identified common grounds that they think make up a community radio station.

"To me a community radio is one that broadcasts to suit the needs of a particular community with the aim of fostering development through its programming. Ownership does not necessarily have to be by the community as long as the community has access to that media and issues are really taken from their needs" says Maumbi Mwendalubi, operations manager at Mosi-o-Tunya Radio Station, a community radio station based in Livingstone about 500 kilometers South of Zambia's capital city Lusaka. According to Mwendalubi, a community radio should also be affordable and diverse in that it's got to cater across all age groups, cultural and religious differences.

Kelvin Chibomba is Station Manager at Radio Mazabuka FM; another community radio station based in Southern province. *"To me a community radio station first and foremost is*

demanded, set up and funded by the community" says Chibomba. According to Chibomba, it is the community which initiates the idea and they own it by funding it through community contribution. It must be non-profit whose interest is only to serve the community and addressing the concerns they are facing. *"It must be community driven, Accessible, Accountable, Affordable, Available and Acceptable. If a radio station has these features, then you can safely say it is a community radio station"* he says.

The impact of Community Radio Stations on communities

There is no doubt that since their introduction, community radio stations have played a vital role in the development of our country through their programmes. In Mazabuka for example, the community radio station has introduced a number of programmes that are already having an impact on the lives of the people. One such programme is the one called *community focus groups*. Through this programme, farmers and other interest groups are asked to identify key issues, which are later aired on radio. Government officials are also invited to respond to some concerns raised by the various community radio focus groups. With support from the donor community, the station has distributed small radio sets to about 40 villages and people are able to listen to government officials responding to concerns raised.

Another practical example is the setting up of *literacy classes for women* who were unable to read and write. The women complained through the radio that they were unable to read and write and wanted government to help them by opening literacy classes. Government through the district administration responded by setting up literacy classes for women in Ndeka Township in Mazabuka. There are now 32 women attending literacy classes in the area.

A similar project is currently being undertaken by PANOS Southern Africa called *Development Through Radio (DTR)*. The aim of this project is to promote the use of radio as a vehicle for increasing women's access to relevant information, encouraging debate, and thereby strengthening democratic and development processes. The project also aims at providing a network for the exchange of information, expertise and resources between women in Zambia and to break down the sense of isolation felt by many marginalized communities and in particular rural women. The project was established in 1998 and there are currently 13 listening groups divided into three groups each of them with a radio cassette recorder. They meet at a local venue on a weekly basis to listening to their programmes at 13:30 hours and later record a programme.

Each week, listening groups of a particular community gather to listen to a programme based on issues that are relevant to them. Topics include the lack of clean and safe drinking water in villages and income-generating projects for women. The project coordinator then collects the recorded tapes on a weekly basis. The project producer from the national broadcaster, Zambia National Broadcasting Corporation (ZNBC) then arranges to record responses from relevant actors to the problems and issues of interest expressed by the clubs. Outside actors include government officials, health professionals, business executives, and local NGO's or international organizations. For example, an issue about safe and clean water would require someone from the Ministry of Energy and Water Development to respond.

Talking about the advantages of Radio Listening Clubs, Simon Mwila from ZNBC, who was also instrumental in establishing the project says, *"Radio as a communication medium offers greater outreach than any medium."* Mwila feels that the high cost of radio sets makes listening clubs a cost effective way of gaining radio access. *"It's good because it involves people listening in groups, interacting, discussing and debating on everyday issues seen from their unique perspective,"* says Mwila. According to Mwila, Radio Listening Clubs empower people by creating awareness of how to exercise one's rights at the same time, breaking the sense of isolation often felt by rural people in many countries.

Another successful story of how community radio stations are helping the community is the one where *farmers in Mazabuka* are now able to receive their farming input on time because they are always in touch with government officials through the radio. Before the station was set up, farmers had little or no information about the availability of farming inputs and were forced to travel to Lusaka to buy inputs. With the coming of foot and mouth disease in the area, through the radio, farmers are advised on how to look after their animals well.

Mazabuka being a transit point for those travelling either to Lusaka or Livingstone has attracted a lot of commercial sex workers and at one time, was leading with the highest levels of HIV infections in the country. As a way of contributing to the fight against AIDS, Radio Mazabuka has launched a lifestyle programme targeted at both youths and married couples. Mercy Kaboyi 25 of Spills Compound, who has benefited from the programme, testifies to how her marriage was saved from the deadly HIV/AIDS. *"I had a problem with my husband. He used to sleep around with women, so I decided to write to the radio station, there is a lifestyle programme where they respond to people's problems. The programme was aired and my husband listened to it. He has since changed his behaviour, and no longer comes home late. I was prompted to report because I was scared he might infect me with the HIV virus if I left the problem like that,"* she said. Kaboyi further adds that, *"The other programme I like listening to is on orphans, vulnerable children and widows. Before we had this radio station, we had a lot of property grabbing taking place. The Tonga culture is such that when a man dies, the family would come to take his properties. Through this programme, people have been educated to respect widows and where there is a will, to honour it."*

Nasutu Nawa is a regular listener to Mosi-o-tunya Radio and admits that the community radio station is playing a big role in sensitizing people about the dangers of HIV and AIDS in Livingstone. *"Radio Mosi-o-tunya is trying, they have introduced a programme called the Quest, they play music and later a competition about HIV and AIDS messages,"* she says. According to Nawa, she has seen change among youths with regards to their behaviour although she cannot entirely attribute that to the radio station. *"There is change in the way people behave now, maybe it is because of the same programme because it is famous especially with the kind of music that they play,"* she says.

Challenges facing Community Radio Stations

Like any project, community radio stations have their own challenges that make it difficult for them to operate effectively. *"We would like to reach the entire Livingstone, but the biggest challenge we have is transport. Currently we only have one vehicle, which is not*

even in good working condition. Often time, we depend on companies to provide transport, although ethically that is not good, but we have no choice. The other problem is that we lack things like tape recorders, Internet and many other tools that would make our work much easier," says Mwendalubi of Mosi-o-tunya. The problems at Mosi-o-tunya radio are almost the same problem with other community radio stations. "Our team cannot reach all the areas due to lack of transport. We only have one vehicle, which has to be used by the people in accounts, marketing and the newsroom. Our appeal to donors is that if they can help us acquire another vehicle," says Chibomba of Mazabuka Community Radio.

Since most of the problems that community radio stations face are similar, it is important that a common solution is found that would address some of the challenges. One such solution is Micro-link being spearheaded by Radio Yatsani. Micro-link is the networking of selected radio stations through the Internet. Through this project, 19 local radio stations will be linked together and be able to access programmes from another station. Although most of them are Catholic stations, a few commercial stations like QFM, Breeze FM, Mazabuka radio, Liyambayi and Radio Phoenix will be connected. The Catholic stations include, Icengelo, Chikuni, Mosi-o-Tunya and Radio Maria. According to Sister Celine, all participating stations will receive a computer each that will be used to monitor other stations.

Just like the Internet, radio stations will be able to monitor programmes being transmitted or aired by another radio station that is connected to the network. If interested in any of the programmes, any of the stations connected could either record the programme or transmit it live as being transmitted. The advantage is that there will be sharing of information on key issues such as HIV/AIDS and many other issues. "If there is any big news here in Lusaka that affects the whole nation and a community radio station in the rural area comes across that information, they can transmit it there and then." she said.

Sustainability

Setting up a radio station is one thing, sustaining it is yet another thing. Unlike commercial radio stations that depend on commercial adverts, community radio stations depends entirely on community contribution. But how is this issue being address by some of the community radio stations? "To start with, this building was constructed by the community. They have continued to help us a lot. We are also trying to raise a bit from advertising, but that is not enough," says Mwendalubi. "The community is the backbone of this radio station, there is no question about that. Without them, we are nothing," adds Chibomba of Mazabuka. In the case of radio Mazabuka, management has targeted commercial farmers for sponsorship of community programmes. This is proving successful, as the station is now able to raise enough to sustain the operations of the station. "Some NGOs are also coming forward to sponsor programmes on HIV and AIDS, Human Rights and other issues." he says.

Advantages of Community Radio

Although community radio is relatively a new idea in most African countries, its advantages surpass that of commercial and national broadcasters. This is because community radio is low cost, easy to operate, reaches all members of the community in their own languages

and, as a local, grass-root media, it maximizes the potential for development to be drawn from sharing information, knowledge and skills within the community.

Legal Framework

Although there has been a number of a radio stations set up in the country, the lack of a clear policy on community radio stations and ICT has been identified as a major obstacle. For example, the *ICT policy* has been in draft form for a long time now, and yet this is the document that is supposed to act as a guide to all those involved in the use and provision of ICT services.

As observed by Chibomba of Mazabuka Radio, the lack of a clear definition about what constitutes a community radio station can be traced to government's failure to come up with a policy on community radio stations. Though there are guidelines on how to apply for a radio station, they do not make any attempt to distinguish among 'community', 'commercial' and public broadcasting. Some might point to the 1996 Information and Media Policy paper issued by the Ministry of Information and Broadcasting Services. While it does mention 'community radio', it does so in a brief manner, without any analysis of the context within which it can be carried on. No specific criteria are set, no definitions, no matter how problematic, are proffered; and certainly no attempt is made to treat the community media sector as an evolving discipline finding its place side by side with other more entrenched forms of mass communication.

The Future of Community Radio

It is apparent that the impact and future of broadcasting in Africa and Zambia in particular lies in community radio stations. The country will continue to witness more stations representing interest groups in society and so benefit from experiences of such radio stations.

Conclusion

It can therefore be said that community radio, if well utilized to empower communities, can be a good tool to stimulate development in our country. For a long time now, radio has exclusively been in the hands of media professionals, who usually don't seem to understand the problems that the communities face.

The sector has great potential to grow but it is bedevilled by a lot of problems. They range from policy ambivalence to financial incapacity. In some cases the involvement of the community is not clear but could be attributed to the newness of the concept. The earlier the policy both on ICTs and community radio station is put in place the better because they will also address issues such as definitions and acceptable quotas of local content in any community radio station and many other issues that surround ICTs. It would not be far fetched to suggest that a deeper, more inclusive process of consultation is undertaken in order for the policy framework to be comprehensive.

UTH's Connectivity to enhance Malaria research

By Glory Mushingwe

In its on-going efforts to put Malaria under control in the country, the University Teaching Hospital (UTH), the major referral hospital in Zambia, is mounting up pressure on the widespread disease, with the help of new Information and Communications Technologies (ICT's).

Malaria, a disease which is both preventable and curable is one of the highest killer diseases in Sub-Saharan Africa.

Because of this prevalence, Malaria researchers continue to search for more information on the disease in pursuit of finding better strategies and solutions to eliminate it and the UTH, being the biggest referral and tertiary hospital in the country has been active in this area of research, in the country, through its School of Medicine and University Teaching Hospital Malaria Research Unit (SMUTHMRU).

However, the SMUTHMRU has its researchers spread across the premises in different office blocks which include the Pediatrics Block A, B-Block, D-Block, Mother's Shelter (also known as CHAPAS), the Pathology Lab and the School of Medicine Block, which has made it extremely difficult for the Researchers and other co-related staff and students to use and/or share resources vital for research in this field.

The SMUTH-MRU therefore desire to develop a Health Research Information System at UTH by building network infrastructure (LANs) within the blocks hosting Researchers and later establishing a reliable Health Informatics System for research and everyday health care use.

With co-sponsors being the Swedish International Development Agency (SIDA), the activity is being done under the Multilateral Initiative on Malaria communication (MIMCOM) project which started last year and is being upgraded this year.

The MIMCom 2005 project provided Internet connectivity only to Researchers residing in A-Block and D-block, while the rest of Researchers in other buildings still don't have the access to the Internet, but the 2006 project which was scheduled to run from January to May 2006, will cater for even more blocks at the UTH. The UTH is a tertiary care hospital located in Lusaka, the capital city of Zambia. It also serves as a District Hospital for Lusaka, with its intended function being to provide tertiary care to patients referred from clinics and hospitals in the country.

Situated approximately 6 km south of the main campus, within the College of Medicine, The UTH has for many years, provided health care services in deferent

research units to the people of Zambia. The Malaria research unit is one of the services provided by the hospital.

The SMUTH-MRU offices and Labs are spread across the hospital premises. The purpose of this year's project is to carry on and extend the work that was done in the previous MIMCom Project. That is providing the SMUTH-MRU with Internet connectivity.

This year, the Internet connectivity will be extended to all Malaria Researchers at UTH and research database established to communicate locally through Voice Over Internet Protocol (VOIP). VOIP enables people in different locations, to communicate by way of seeing and talking to each other on the Internet.

This way, the doctors will be able to easily communicate and share Malaria information from their respective offices.

According to project Coach, Godfrey Chikumbi, the Internet connectivity will provide the Researchers with services that can improve their work.

"The information communication technology services that this project brings will enhance the flow of information within the SMUTH-MRU and give it further access to Internet based information and communication. It will also enhance the organizations internal communication through interconnection of Researchers and the development of a database for information gathering and sharing. All this will improve the efficiency of the research effort and enable easier sharing of data," Chikumbi said.

And Emil Fredriksson a student, who is part of the project team this year, stated that this project is important because communication between people and access to formation/data is key to success in all areas of research, saying, one very good tool to improve communication is ICT.

"By using ICT we can partly bridge the geographical gap between the researchers and thereby making their communication and work more efficient," said Fredriksson. He further explained that the Internet connectivity and LAN has two goals, one of them being to interconnect the computers in a Intranet. That can be used to share information locally at UTH and in connecting to remote locations.

The second goal he said was to provide all computers in the network with a common Internet connection. "Within the Intranet and also accessible from the Internet will be a health informatics system that will be used for research and studies. For example, a remote research site in Chipata compound can be connected to the Malaria research centre at UTH and can share such information as patient records and other materials," he said.

He also stretched the point that the second phase of the project was necessary as it would address more areas than was the case in the first project saying "the first project could not fulfill all the needs of UTH and also more needs were discovered on location and therefore the project was extended."

Fredriksson added that apart from just offering access to internet to researchers, a general purpose data network could in theory carry any kind of data. "This means that in the future large scale deployment of Voice and Video services in the network

would be possible.

This year's project has a pilot Voice over IP part where we will try out the technology. VoIP could improve the contact with future remote sites as well as the communication on campus and also drastically cut cost on international calls," he explained.

Chikumbi added that "The success of this project will mean that ICT's have improved at SMUT-MRU and strengthening communication for Malaria research centres in Africa."

He stated that the previous MIMCOM 2005 project only covered D-block and part of A-block, but the number of blocks would be increased because the project had become much wider as there was still need to have more Malaria Researchers connected to the other blocks through the Internet.

"MIMCom has however had a similar project carried out at the same institution under MIMCom 2005 and might therefore have much higher expectations since the scope of this particular project is much wider than before," he said.

He observed that the rest of the blocks have no Local Area Network (LAN) and Internet connection and it was envisaged that the upgrade project at UTH should target other blocks that were not covered in MIMCOM 2005 project, in terms of the LAN and connectivity between these blocks.

He said that only 30 percent of Researchers were benefiting from the Internet service which was provided in the previous project, due to lack of LANs "In the 2005 phase of the project, wireless technology was used to provide Internet services to the Malaria

research unit at 128kbps from Microlink Technologies, a local ISP," he said adding that The Site required a big server in order to establish Health Informatics Centre.

"The Health Management Information Systems both at the UTH and the clinics are very weak, leading to the creation of an information vacuum in the health facilities," he said

He also stated that the manual collection of information and its compilation made it very difficult to obtain quality and useful data that could be utilised for planning and monitoring of patient care, which he said was essential in guiding policy formulation and implementation of health services. "Fedora core 3 Operating System was used and a lot of server freeware was used, such as send-mail, Apache, Zebra, usermin, webmin, etc. The usage of Open Source Software lead to a great saving in cost of about 10,000 US Dollars in comparison with using Microsoft OS, Oracle and Veritas Software" Chikumbi explained.

Fredriksson added that using Open source software (FOSS) has advantages that do not exist in Microsoft and that is why the MIMCom team decided to settle for FOSS saying it is free, both free as in free of charge(most of the times) and as in free to change.

Said Fredriksson, "The free of charge part has its obvious advantages, especially when working with limited resources such as is often the case in Zambia.

Free to change means that we can modify and customize as we please. This

means that we are never dependant on the software company."

He however stated that, "There are of course obvious cons with open source. First and foremost is that it most of the times require more skill and experience from the administrator/maintainer and IT-staff.

Secondly support contracts are also rare with open source. In my opinion Zambia has a unique opportunity to utilise open source to improve the ICT in the country both at a low cost and with the same or even more advanced technology than what many of the

Commercial alternatives (e.g. Microsoft) have to offer."

Chikumbi went on to explain that the project has three major components namely: Installation of the LAN in various blocks, geographically separate blocks, Installation of Wireless to interlink these LANs Wireless LAN was installed in A-block in the phase one

of the project; however due to thickness of walls, the coverage range is very limited, only offices near Access Points have strong signal. In phase two (the 2006 project) it has been proposed that 22 network points be installed to link all key research officers to the MIMCOM network.

He added that a lot of cables would be used in this block because the offices are many and widely separated. Chikumbi stated that "No LAN exists in this block and recommendation to install five network points has been given under this project (2006). The offices in this block are fairly close to each other and few cables will be used.

He added that "LAN in the school of Medicine block will be connected to the rest of the SMUTH-MRU-MIMCOM network using wireless link.

"According to the site survey we carried out, there is a clear line of sight between the school of medicine and Pediatric building. Ten network points will be installed in this building and one 4u cabinet to accommodate the LAN devices.

The Campus Wireless Network would be connected to A- block, where SMUTH-MRU server is located," he stated.

According to Chikumbi, this will enable Malaria Researchers to have access to the Internet and the local database that is being developed. The cheapest wireless radios are being proposed in order to bring the cost of the whole project down "The labour for the implementation of the whole project might cost 1,800 USD, if casual workers have to be hired," he suggested.

The grand Total was reckoned at USD 28,751.50 (Approximately K100,000,000) (Hundred Million Kwacha at the time). The risks that were identified in executing the project included the fear that external Contractors could deliver inadequate services; the results could be highly unsatisfying; there would be an inadequate platform to configure the LANs, that the high team might not be able to start configuring in time, and that they could be miscommunication with Contractors and or UTH staff, among other risks.

Chikumbi pointed out that to prevent some of those risks, his team identified the necessity of having high communications and follow ups and using more than one

source.

He said that high miscommunication might lead to unwanted results and missing equipment on site.

Chikumbi placed emphasis on the need to have LANs deployed in buildings being used by Researchers, saying: "The MIMCOM 2005 Project provided Internet services to SMUTH MRU Researchers at UTH. Due to limited network (LAN) at UTH, these services are only being used by few Researchers. Currently, out of 12 Researchers only

4 of them are accessing the Internet. Therefore, there is a need to deploy LANs in buildings being used by these Researchers and extend the Internet services to them. The LAN and Campus Network was not included in the MIMCOM 2005 project, mainly because the site had already applied for the funding to other donors, which has not been materialised up to this time. The whole project could cost about 28,751.50 USD if all sections are funded." "However, it's up to MIM (Multilateral Initiative on Malaria) to decide which section they could fund and if it's within their budget."

Conclusion

With The UTH being a government hospital, it could only be expected that in an event that the funding from the current sponsors of the project is withdrawn, in future, the institution itself would take up the responsibility of funding the project for the sake of

sustainability, and allocate funds derived from the government's budget on health, to it. However, such projects that seek to address critical health concerns such as this fatal disease Malaria, are worth being supported, by all concerned organisations, both from

the government and private sectors and indeed all development partners.

What better programmes could money be channeled to, than to projects that address health issues that could prevent certain premature deaths, such as deaths caused by this preventable and curable disease Malaria?

For the nation and other countries affected by Malaria to be able to curb it, adequate research on the best measures to employ in this fight against the endemic disease, is necessary, and ICT's such as the Internet, are the key to that research in this age.

MIND



Information through entertainment: Music being used as a channel to send messages on issues such as HIV/AIDS, Malaria, Poverty, Tourism, etc. **Photo taken by:** Diana Mulilo

MINID

ICT Project to Link Farmers with Research

By Chris Kakunta



“Outdoor video presentation, Mwenda Village, Luapula Province, Zambia”. The video showing was held as an income generation activity by a local school teacher. He charged ZKM200 (less than 10 cents) per person per viewing to enter a fenced enclosure (formerly a garden) to watch a Nigerian action film. **Photo taken by:** Christopher M. Annear.

In 2001, an unfamiliar pest attacked several maize fields in the remote parts of Serenje. The villagers agreed to send one of the most trusted farmers in the area to deliver a sample to the District Agricultural Coordinator's (DACO) office for expert advise.

Unfortunately, the DACO's office was unable to identify the pest and therefore advised the farmers' emissary, a Mr. Mwelwa to take it to Mt. Makulu Central Research Station, in Chilanga, about 450 km away from Serenje. The following day, Mr. Mwelwa travelled to Mt. Makulu where the pest was identified as an armyworm. After two days, the experts mobilised themselves and travelled to Serenje. By the time they reached the villages, most of the farmers' fields had been wiped out. Mr. Mwelwa and other villagers were left disappointed as their staple food had been eaten by the armyworms.

He regretted that had Mt. Makulu been closer and communicated with them in time, their crops would have been saved.

Each year, farmers lose a considerable amount of crop and livestock due to poor information flow between the farmers and agricultural experts. Yet, a number of research institutions are scattered around the country to help farmers when such problems arise.

One such institution is the Zambia Agricultural Research Institute (ZARI), a research institute under the Ministry of Agriculture and Cooperatives (MACO).

It has four (4) main functions that are inter-twined. The Crop Improvement and Agronomy division has the overall objective to develop and adapt appropriate crop varieties and agronomic technologies for all categories of farmers in different agro-ecological regions.

The division is also mandated to develop stable and high yielding varieties of both food and cash crops. These crops must have high nutritional values, good storage ability and acceptable qualities.

The division is additionally responsible for breeding of crops that are resistance or tolerant to pests, diseases and other adverse conditions such as drought, soil acidity and stability.

Similarly, the second component is the Plant Protection and Quarantine division which is mandated to develop appropriate pre and post-harvest technologies aimed at preventing or minimizing crop losses due to insect pests and diseases. It has a responsibility to develop crop varieties that conserve nutritional value and prolong

shell life of food crops.

Other tasks include development of appropriate plant disease and pest control technologies that enhance protection of crop plants.

The third equally important division under ZARI is the Soils and Water Management. The division is responsible for development of appropriate soil and water management technologies and packages for sustainable agriculture.

The final division is the Farming Systems and Social Sciences. The component deals with agronomy, economics, nutrition and rural sociology.

The component is vital because it deals with the social and economic issues that inhibit farmers from realising their full potential.

It is based on the realisation that the largest proportion of Zambia's rural population has farming as their main occupation. The farming systems and social sciences division has a mandate to study and understand the small-scale farmers' farming systems in a holistic manner.

This is done to guide the commodity research teams in conducting relevant and demand driven research with improved targeting of technology dissemination.

The component is also mandated to adapt technologies generated by the ZARI to farmer's socio-economic and cultural setting and recommend to farmers' socioeconomic conditions.

It also studies existing farming systems and identifies production constraints and potentials of small-scale farmers.

Against this background, ZARI is central to improved rural farmers' livelihoods because its activities touch on some of the key issues that affect farmers.

Some of the key issues that affect farmers include lack of information to control pests and diseases and other agronomic requirements like which crops are suitable for which agro-ecological zone.

Therefore, when the International Institute for Communication and Development (IICD) organised a Round Table workshop on 'Improving Livelihood Opportunities through ICTs' for stakeholders involved in livelihood activities, ZARI recognised the potential of ICTs to address some of their challenges in sharing and availing information in suitable formats to its key stakeholders, and thus decided to formulate a project to explore how ICTs can enhance their activities.

The organisation recognised the central role it plays in providing appropriate and up-to-date agriculture research information.

Under this partnership, ZARI and IICD are piloting a project to enhance communication between the research institute and the farmers and also at improving communication and knowledge sharing between researchers and subject-matter experts.

The objective of the project is to increase the efficiency of ZARI by improving the accessibility and relevance of results to users of agricultural research technologies by enhancing the information and communication processes between ZARI and its key stakeholders.

With funding totalling about 99,600 Euros, V-sat satellite Internet connectivity has

been established at the research station in Chilanga and Misamfu Research Station benefiting from similar services as a satellite research centre.

Misamfu Research station was chosen as a remote project site because its research activities are linked to ZARI and it is used as a back-up to most of the experiments being done at head quarters.

Project Manager Davy Simumba said all the four domains at the research station have been supplied with computers and a number of capacity building workshops for staff have been held to help them meet challenges of Information and Communication Technology (ICT) such as being able to communicate with other institutions at local and regional level.

ZARI has existed for some time now and some of the achievements are noticeable among the Zambian farming community.

For instance, the development of a Sweet potato called Chingovwa, which was originally from North western province and improved at Misamfu Research under the Root and Tuber crops is one innovation that has spread across the country through their hard earned promotional activities though adaptation has been very slow due to lack of adequate communication facilities.

The institute's greatest challenge over the years has been how to effectively communicate with the farmers. Mr. Simumba says while their priority is to communicate with the farmers, the researchers were also cut off from the rest of the world and the rest of the African and international agricultural information community.

Mr. Howard Tembo, a Soil Microbiologist at ZARI is happy man who has just shared a project proposal with his counterparts from Zimbabwe.

"I am now able to communicate with the institute without necessarily going there and also my fellow scientists abroad. It's working to our advantage," said Mr. Tembo.

Similarly, Mr. Simumba says information sharing between ZARI and Misamfu research station has improved with the two stations communicating on a daily basis.

The two research stations, unlike before when even telephone communication was a problem and funding to monitor and compare experiment results were scarce, they are now able to communicate via e-mail and skype (chatting) which has drastically reduced their costs.

The Internet connectivity has opened a new page of hope and opportunities to the two institutions though, for now, the challenge is how to package the information they want to send out to the farmers.

He said: "We generally have a problem on how information moves to our clients and packaging it in a manner that it can easily be used by them."

ZARI is not an information provider, but one that transforms scientific findings into something useable to the farmers.

Under this project, one of the identified constraints is the organisation's inability to communicate in a manner that an average person would be able to understand. For instance, farmers with low levels of literacy and limited knowledge of English may

not use the information that shall be provided by ZARI. However, once the website for the institute has been developed, it is envisaged that information on all the four divisions will be placed on the site for use by all interested parties in collaboration with all partners like NAIS, some of these problems could be ironed out.

ZARI is worried but optimistic that NAIS another would be beneficiary of IICD support will work closely with them and narrow the communication barrier that threatens the enormous potential of ICT connectivity

NAIS would be able to help for example, at source (district level) with downloading information and where need may arise translate some of the information that ZARI may have for targeted audiences like farmers.

A meeting held recently among ZARI, NAIS and IICD recognised the need for the two institutions to work together for enhanced farmer productivity.

“We agreed that NAIS at local level would generate message from farmers, pass it on to ZARI, and then ZARI passes it on to NAIS for broadcast once a solution has been found to the problem,” said Darlington Kahilu, a member of the IICD project steering committee at NAIS.

Although ZARI has moved faster than NAIS in terms of implementing the IICD project, NAIS Head, Enock Katowezhi believes that his organisation will equally be funded so that the farmers are serviced efficiently.

He says NAIS is ready to work with ZARI in this project, admitting that the delay has been caused by what he termed “procedural difficulties” implementing the NAIS project.

For now, he says: “We will have to rely on our existing facilities, though limited, to meet the demands of ZARI and the farmers.”

ZARI is looking for a much more sustainable partnership with all its stakeholders; farmers other research institutions outside its mandate and the media.

Mr. Simumba told me that plans are underway to discuss with institutions like the Seed Control and Certification Institute (SSCI) and schools within its neighbourhood on the possibilities of these organisations having connections to the ZARI Internet server because it has the capacity to handle many more computers. He said SCCI has already shown interest and once modalities have been worked out, this would reduce the monthly subscriptions payable to the service provider and improve the financial sustainability of the use of ICTs.

“We are currently paying US \$ 475 per month while our colleagues in Misamfu are paying US \$ 375 per month which IICD has been able to channel funding for from international donors” said Mr. Simumba, adding that the Chilanga community would no doubt benefit from the Internet connectivity.

The facility shall also expose the community and school children to the computers which are currently limited to elders only.

For long term sustainability and ZARI being a government run institute, Mr. Simumba said his organisation has submitted to the Budget office for funding in the 2006 budget so that it can cater for maintenance and other costs. This is also an indication that once funding from IICD ceases, the organisation will still be able to

run the internet connectivity project.

When the IICD funding phases out, ZARI says it intends to set-up a fee paying Internet café that would be used by the public because now there is no such facility. This, he says will enable the organisation meet its monthly rates and create employment for the many youths in the area.

Although it is difficult for one to measure the success of the ZARI/IICD project by a layman, the general enthusiasm among the staff at the institution shows that for now, many farmers and other stakeholders would be able to access ZARI services. “We are happy to have this facility now because some of us have even started training programmes via internet which we could have otherwise not have been able to before we were connected,” said Stanslous Malauni, an Agronomist at ZARI.

Once connected to the researchers and innovations by other stakeholders like the Zambia National Farmers Union to have similar facilities around the country, farmers will have information closer to their doorstep.

The greatest challenge for ZARI, therefore, is to consolidate their already existing information data base and refine it in a manner that, not only those with access to the internet connectivity could benefit, but also every stakeholder would appreciate through various partnerships.

MIND



Computers are a source of business communication. *Photo taken by: Diana Mulilo*

Coldreed Training (CRT): Building people's capacities through ICT training

**Computers are usually
used as typewriters
as opposed to having
them help with efficiency
in the organisation**

By Lydia Nyirenda - Kangwa

Many Government and non-government organizations seeking to use new Information and Communications Technologies to increase their productivity fail to do so mainly due to insufficient skills or knowledge to enable them to do it.

This results mainly in the misuse of equipment, for example computers which end up being used as typewriters as opposed to having them help with efficiency in the organisation, such as proper documentation, connecting the wings or departments of the organisation through the Local Area Network (LAN) or/and internet research purposes, among other ways that would enhance operations.

Different from other ICT training providers, the institution has decided to prioritise training of low income or not for profit organizations.

Coldreed Training Managing Director, Yese Bwalya, says "There is need to equip people with best skills to use the new tools and machines that are being utilised in the area of Information and Communications and Technology (ICT's). The realities obtaining in such organizations, where most members of staff lack adequate skills to utilize and use ICT's for the betterment of their operations, naturally demand special training intervention - people should be provided with quality training, which should be delivered in a variety of methodologies, in appropriate languages and with suitable teaching aids". Bwalya said that Coldreed services were designed to meet such training needs faced by organizations.

"Building capacity is a big challenge because it is a cross cutting issue and it meets people of all levels despite their education and background," Bwalya said that it was due to the above mentioned reason why his organization was formed and also to answer to the training demand. He also noted that most training providers that were in existence were formed with the purpose of giving training to school leavers, whereas Coldreed saw it fit to provide knowledge to people already in employment.

"Our organization was formed with the purpose of giving training to people already in employment and help them understand how to use one of the ICT tools, the computer, which will also help them at their work place," he said.

Coldreed Training was born out of Coldreed Communications Ltd., which was in the business of designing web solutions at a time when organisations were beginning to embrace emerging ICT's so as to have a stronger online presence, some three years ago. With time, the organizations that had acquired web sites through Coldreed Communications started asking for skills in website management and other related skills. The International Institute for Communication and Development (IICD), which was at that time working with training partners such as Microlink training department and Zamcom, engaged with Coldreed Communications staff who were availing their expertise for IICD-sponsored ICT training programmes. IICD later decided to support Coldreed's project proposal to extend Coldreed with a dedicated ICT training wing. With this support, Coldreed transformed its core operations from web solutions to ICT training, and so a separate training center was opened named Coldreed Training Limited (CRT), as Coldreed Communications, the department that was at the time dealing with web solutions phased out.

Apart from financial support to establish the training wing, some of the staff were sent for training to countries like Uganda and Ghana, so that their already existing capacities could be enhanced by exchanging experiences and knowledge with their peers who also implement ICT for Development training

According to Bwalya, CRT offers training to these organizations that implement ICT-for-Development activities throughout the year at least once or twice every month. It has also so far managed to cater for organizations in the Northern, Copperbelt, Southern, Central and Lusaka provinces.

Bwalya is confident to say "We have transformed some organizations very radically; we've had direct impact, directly linked to results with organizations' operations made much more

He observed that there was a low turn up of students because a number of them were leaving the country to go and have the same training program in another country, saying "The people who are in a habit of leaving the country to undergo the same training as that which Coldreed is offering are doing so for their personal benefit, as many of them are only interested in getting allowances," he said.

He advised organizations to stop sending staff members to undergo training outside the country, noting that the advantage of training at local institutions such as Coldreed was that the students would be trained by trainers who fully understand the culture and environment in which the country is operating.

Another advantage of training locally is that one could still have access to locally available support, even after having completed a training programme, as they could easily go back to the institution and get clarifications in areas where they do not understand.

He said it was difficult for a person to apply the knowledge learnt when they are taught by people who do not understand their working environment.

"We need to change this attitude of sending people to get training from outside the country, when there are local training providers who can also provide high quality training," Bwalya said.

He concluded that the new computer training his institution was offering had attracted a lot of sectors, from both the identified organizations that are partners of IICD and other business clients.

"The country is benefiting from ICT's through data collection, web design, Internet searching, on-line exchanges of information and information storage. In today's world using ICT's can help bring results closer to the people through well-researched documentation," Bwalya said

With the sensitisation that is currently going on about the advantages of using ICT's in developmental projects, the importance for ICT training should not be overlooked, as it is necessary to empower people with the right skills to enable them utilize these ICTs to their fullest potential

More local organizations, especially training institutions, need to come on board and offer ICT training and not only leave the responsibility to a few training institutions, such as Coldreed. With more institutions offering this kind of training, it would not only create a competitive environment in this sector, but will also give people a wider choice of where to get ICT training in the country.

ICTs an important tool for economic development



By Machova Musanshi

Although I'm Zambian and have lived in my country since I was born, I had never taken time to visit the Eastern province.

This is despite the fact that I have roots from this place because my late grandfather came there.

My chance to travel to eastern province availed itself when a colleague of mine from 'MIND' asked me if I could travel to Chipata on a mission to assess the impact of ICTs (Information Communication Technologies) in particular Radio Breeze on the local community.

ICTs could be defined as tools used to communicate, such as Radio, Television, Internet and now Cellular Phones among others.

efficient. For example, we trained the Kalomo women's group with marketing skills and other programmes, their records are kept much more efficiently and orderly, which in turn has increased accountability and transparency."

One of the beneficiaries of Coldreed's activities, in Lusaka testifies to how the training has changed his life, saying the computer skills he learnt from Coldreed have helped him in his work, saying that he was able to work long hours without the help of the secretary. "As a manager, I had no computer skills, so I depended on my secretary for my work, this made it difficult for me to work long hours," said. Kalaluka who received training in operating Microsoft's 'Word' and 'Power Point' applications.

He said despite the program having ended, he still gets back to Coldreed for advice and they help him understand where he would be making a mistake.

"I used to attend lessons after working hours, it was a big challenge but I had to work hard, I have finished with the program but they still attend to me," Kalaluka said.

He said that Coldreed had met his needs adding that the training provided by the institution was worth attending.

Another beneficiary of the Coldreed's training is the Zambia Agricultural Research Institution (ZARI), where some agriculture researchers have been trained in basic ICT operations.

Davy Simumba, an agriculture researcher at the institution that coordinates their ICT project, said that the ICT training tools have helped his institution in the search for agricultural information.

Simumba said that with the ICT skills that researchers and some employees at the institution have acquired, they are able to work efficiently, adding that this has also helped in their activity of gathering and making available critical farming information to remote farming communities in the rural parts of the country.

He also bore testimony to the importance of ICT's to his organization

"Using ICT's enables the farmers to have equal information on agricultural produce, this also helps them make informed decisions. "

The Zambia Association for Research and Development (ZARD), through one of its ICT programmes, called the WIDNET, has had some staff trained and empowered with similar skills as those imparted on the ZARI employees and results have shown positively.

"The training has transformed me in to a skilled programmes coordinator in the area of information management, and I am more confident and have developed innovativeness in handling the Information sharing programmes that ZARD is coordinating," said Millica Mwela, the ZARD programmes Coordinator.

Like other institutions, the experience in providing this service has not been all rosy for Coldreed Training, as it has had its own challenges. Bwalya said the marketing is one problem which is affecting CRT, because it is difficult for people to get attracted to a product which cannot be touched. Training is something that one acquires and stores in the mind and people cannot see the immediate benefits, as it is not something that can be physically displayed.

I was excited about this trip because it gave me an opportunity also to access business opportunities in terms of advertising and editorial articles for our paper. We started off from Lusaka's Intercity Bus Station around 15:00 hours and according to many in the bus, we were scheduled to arrive in Chipata between 21:00 and 22:00 hours. The road to the east gives you rare opportunity to see a wide range of things such as mountains, which are not common in Lusaka. Eastern province is mountainous starting from Chongwe right up to Chipata itself. I had just started enjoying watching the mountains and small industries that are dotted along the way, when we had a break down just after Chongwe. This was about 16:00 hours an hour after leaving Lusaka. We had hoped that within an hour or so, the problem would be rectified but alas, little did we know that the problem was going to take more than 10:00 hours. As it started getting dark, I got concerned because I needed to contact the people both back home and in Chipata that we were stranded. I had my cellular phone quite okay with talk time but there was no network in the area and hence could not communicate with any one. It was at this point that I realised how important communication is and that without it, there would be no meaningful development. In as much as Zambia is trying to promote the use of ICT's like cellular phones, infrastructure development in this area is still lacking. For example, in other parts of the world, one is able to communicate through out the journey without being out of coverage area. I thought to myself that, If there was network, I could have informed the people at home about the situation, or we could have informed the owner of the bus about the situation, all this could not be done because there was a break-down in communication. At 19:00 hours, I started asking people if there was any one with a radio so we could listen to the news but alas, there was no one with a radio. Somebody said even if there was a radio the area where we were could not access the airwaves. At about 23:00 hours, we saw a small car coming from the eastern side going to Lusaka. We all suggested that we should stop the car and ask if any of the bus crew could be given a lift to Lusaka so that he could inform the owner of the bus. Lucky enough, our suggestion worked and one of the bus crew members left for Lusaka. I started asking myself at this point whether; this car, which, provided the most needed access to the owner in terms of communication, could be classified as an ICT just like cellular phones or computers. This I know is quite debated but I think at this point, this car to me could be classified as an ICT because it became a medium of communication. Without which, there was no way the owner could have known about our plight. A few minutes before 01:00 hours, the man we sent to Lusaka came back with a mechanic who immediately sorted out the problem. We started off again to Chipata around 01:40 hours. By 06:00 hours, we had reached Petauke, which is almost half way to Chipata. What first caught my eyes here was the painting by Celtel that was all over town. Why painting all the groceries? What is Celtel trying to achieve by painting the all town? I still do not have the answers to these questions because I saw the same thing in Katete, Sinda and Chipata. Almost all the shops from the smallest Katemba (makeshift shop) to the biggest were painted in red, which is the corporate colour for Celtel. As we were leaving Katete around 07:00 hours, I saw an old man apparently going to the

field on a bicycle with a hoe behind his bicycle busy laughing while talking on a mobile phone. I then understood to some extent why Celtel's paintings were all over, off course "*making life better*". Farming in most areas including my own village in Mpongwe is no longer the same with the coming of these ICTs (mobile phone). Though, I'm not sure of what he was talking about, I took it that he was either talking to his wife, or children that he was on the way, maybe asking money from his son in town to buy the in-puts or maybe to would be clients that he needed the in-puts to be delivered or that the crops were ready for collection. If you are to talk about the benefits or impact of ICTs, there is no doubt that life has been made much easier now than then. That old man would have opted to write a letter to his son or clients about in-puts, which would have taken a month or two by which time, the crops would have been destroyed but by merely placing a button, he was able to communicate with potential financiers and buyers. With other ICT's like internet, farmers are able to sell goods directly on the computer without physically meeting the client. As for students studying abroad, by merely pressing a button on the computer, they are able to communicate with relatives back home. These relatives could be as far as Kasama in Northern Province. We reached Chipata around 09:00 hours, and were greeted by bicycles the whole town and mountains surrounding the town. I'm told there is a bicycle factory in Chipata although I did not physically visit it. It did use bicycles to move from one place to another reaching out to my clients, as a means of communication. Most towns in eastern province are not as developed as those in Southern province or Copperbelt. The road itself is in a poor state that it takes about two hours from Katete to Chipata when it can only take about 45 minutes or at the most one hour. Chipata is a busy town with a lot of business activities ranging from trading to manufacturing. Malawi, which is just a few Kilometres from the town, provides a link to other countries. Mozambique is also accessible through Luangwa and Katete. Tremendous tourism potential exists in this small town of Chipata and it's surrounding South Luangwa. Communication is slowly improving with Celtel being the leading service provider although CellZ is also doing fine and MTN. There is no Radio 4 or Phoenix in Chipata but Breeze FM. So, I decided to visit Breeze FM just to find out how the station is doing or contributing to the well being of the local people. Mike Daka is the Managing Director of the station and told me how the radio station is contributing to the community. He also explained how using computers and internet, the radio is able to communicate with the rest of the district. According to Daka, though the station is commercial, it is community focused in that all the programmes are tailored towards the community.

“We are a commercial radio station but if you look at our programmes, they are community focused. We have specific programmes that looks at good governance, human rights, HIV/AIDS, environment, re-forestation, farming and small businesses or trading.

He added that his station was a true example of how a private owned radio station with a public service mission can remain financially viable.

Under business or trading, the station has introduced a programme called Zanyanchito. This programme tries to look at a life of a trader. It can be a shoe repair, a sole trader at a Katemba or anyone in the trading business.

Reporters would for example follow the shoe repair to his workshop and interview him about his business.

As a result of this programme, People of similar interests in repairing shoes are able to lean from his experience and advice.

Staffs from the radio station also provide advice to such people on how to improve their businesses or where they can get funding to improve on their businesses.

There are also programmes tailored towards women like those selling in the market, tailors and those who plait hair in the market. Women from all walks of life have found these programmes helpful as they provide the necessary information to advance their skills. Those without experience or skills lean a lot through the advice given by the entrepreneur.

As for children, the station runs a programme called “Child Labour”. This programme has received overwhelming response from the general public as it tries to educate them on the need to respect children’s rights.

Priscah Mwanza has been following this programme since it started and hinted to me why she likes it so much.

“I don’t miss this programme as I have learnt a lot. I always reflect on my life because I used to do the same things that they advise children should not do. I used to sell things at the market and used to do things that elderly people are expected to do, I was abused by my uncle, I should say,” she narrated.

She added, “We really appreciate Breeze FM for introducing this programme because even in neighbourhoods, we have seen a change. People now choose what kind of jobs to give their children and for those who are still in the habit of doing that, the local people are able to speak out.”

Another programme that is of interest to the public is one that looks at issues happening in the community and cannot ordinarily be explained.

“We have a man called Gogo Breeze. His job is to try and find answers to such questions or explains issue that have no answers to ordinary people in the village,” says Daka. “Retirees have their own programme looking at what they did before they retired and what they are doing now. A lot of issues come up during this programmes and people lean a lot from this programme.”

Munzi Wanthu or our village is yet another programme that teaches people on how people in different villages live. They share experiences with listeners from other villages on different projects being undertaken at village level. The result is that people from other villages are able to lean from their colleagues and develop the area without waiting for government.

“It is basically an exchange of ideas about how people in the villages are working to develop their own areas, without waiting for government” Daka said.

“I like this programme so much that each time it starts, I would stop whatever I was doing just to listen to the programme. We hear about problems people in other villages are facing and how they are solving them. I once listen to a programme where boreholes were being sunk in Lundazi, I think it is a wonderful programme,” said Elizabeth Phiri a marketeer at Kapata market.

According to Daka, another successful programme is the bee-keeping project. After visiting one village and leaning about how they are doing, other villagers got interested. The result again is that funds were sourced for them to buy bee hives from a certain white farmer. The white farmer did not only provide the bee hives but also training. Currently, the same white farmer is buying honey from the villagers for both local and foreign markets.

It can be noticed that not all these achievements could have been achieved if it had not been for the effective use of this ICT in the name of Breeze FM.

“We basically use computers here on most of our work. All of our work is computer based. We first record our programmes on the computer and then edit them using computers, so there is little or nothing that works without computers here,” said Daka about how his station is using computers as an ICT to reach out to the public and contribute effectively to the well-being of their lives.

Daka also talked of several letters from the community as a true reflection of how important radio has become to the people of Chopata.

“Gogo Breeze attempts to answer some of these letters which, come with lots and lots of issues ranging from marital problems to community related conflicts and development,” said Daka.

As I was winding up my trip from Chipata and since I had run out of cash to book a taxi to the station, I again resorted to booking a bicycle at K1000 to the station. The bus was to leave at 14:00 hours and I was supposed to be at the station before that. I know that this bicycle could not be classified as an ICT but certainly the car that helped us when we had a break down surely is an ICT.

Only effective use of ICT's like the way Breeze FM is doing will bring amount meaningful development.



ICT's bring hope to peasant

Farmers

By Caroline Nenguke

The term Information Communication Technology for Development (ICT4D) has become the catch phrase in development language. This is because the expansion of technology has become a pre-requisite for almost any modern development process. Technology has made the information age possible as people are going through a historic transformation in the way they live, learn, work, communicate and do business. It is for this reason that the championing of the use of Information Communication Technologies (ICTs) for development cannot be over-emphasized.

Not very long ago, ICTs were regarded as no more than gadgets and symbols of power for the elite and affluent. Today ICTs are gaining a proven track record, and are increasingly becoming accepted as engines that can foster development, thereby reducing poverty and dependency among the world's poor.

There are still people or communities that have not yet heard about ICTs, while some think this language means computers and the internet.

But as the term denotes, ICTs are basically tools used in the dissemination, transmission and reception of information and range from radios, televisions, mobile phones, computers and electronic devices.

ICTs and agricultural markets

ICT's have also become marketable in the Agriculture sector. Jessy Phiri, a peasant farmer in the Eastern province of Zambia, is proud to admire her produce, after a good farming season, but despite the satisfaction that her family will not go hungry, she laments that its of no use producing so much if there is no market for the produce.

This is common in most rural settings based far from commercial trading areas and where the roads are impassable.

While rural dwellers in Zambia depend on agriculture, on many occasions, peasant farmers fail to sell their produce due to the difficulty in accessing market and end up giving them away at prices below production costs.

The advent of ICTs has brought hope to peasant farmers whose future would otherwise be bleak under the said trend.

Mobile phones as ICTs for development

Despite it being no news that some people have never even made a phone call

before, especially the rural based, mobile technology is helping many Zambians in both urban and rural areas where there is a Network Connection to communicate with others.

In Zambia, it is however the digital divide in information technology that has caused some to have or not have access to the information that others have and need.

These troubles have been derived from a complex range of problems, including the lack of: telecommunications and other connectivity infrastructure; skills and institutional capacity, representation and participation in development process and financial resources.

The mobile phone is an ICT tool that is enhancing development and that is reaching unprecedented high levels in fostering women empowerment and development. With a wide use opposed to, the internet and computers, it has the ability to transcend language barriers as people communicate through the Short Message Service (SMS) or by making normal calls, whereas computers or the internet need special software to translate into local languages. Further, it is easier to learn using a mobile phone than computers or the internet and it is common knowledge that there are more mobile phones in Zambia than fixed landlines.

A recent project by One World Africa, funded by the British Government Department for International Development (DFID) through the Building Communication Opportunities (BCO) programme and supported by Celtel Zambia, a mobile phone service provider, is a remarkable example of how ICTs such as mobile phones can be used to enhance empowerment and consequently development.

The project was conceived out of a partnership visit undertaken by One World Africa staff after realising the challenges faced by some women's groups in accessing and disseminating information. One World Africa, a non governmental organisation that fosters the use of ICTs for development, partnered with the Chipata Women's Development Association (CWDA) which is using mobile phones for development and helping women improve their through skills training among others in remote areas of Chipata..

One World Africa is working with the Chipata DWDA to improve the communication of developmental information from the district to the area associations and to further connect the district office to several information sources. These include information sources such as the National Agriculture Information Services (NAIS), Community Radio Stations, the Ministry of Community Development and Social Services, District Local Authorities, the Food Reserve Agency (FRA) and traditional leaders.

Currently, the project focuses on agricultural and health information with the opportunity to expand as the sources increase and in response to the demand that may arise.

The project uses mainly the SMS, because it is cheap and also because the women are able to keep a record of their messages for future reference. The District Association compiles information based on the informational needs of the area associations and sends this information via SMS to all the area associations.

Sometimes, depending on need, specific information is sent to specific area associations.

Bornwell Mwewa, OWA coordinator of the project says, "The project has brought to the women a tool for communication and access to developmental information in the areas of health, agriculture and education which was not the case before and also enhanced their personal communication.

Mary Mumba, a committee member with the CDWA, says the project has been successful because it has enhanced the income of the association members by enabling them sell their produce at competitive prices with less effort.

The mobile phones are also used to help sustain the organisation by using them as pay phones for the community. Community members pay to make calls or to send SMS, thereby generating income for the organisation.

A similar project is run by The Kalomo women's project in Kalomo and funded by the International Institute for Communication and Development (IICD) Small Initiatives Fund.

Whilst the women in Chipata use mobile phones mainly for agricultural produce information and markets, the Kalomo women mainly use the internet and email to get this kind of information. They use mobile phones only for sustainability and communication.

The Kalomo women have been using the only and first resource centre of women in the district to improve other women's money making ventures by using the internet to market their produce. On the other hand, the group brings together produce from within the area to a common place where traders bargain and sell their produce at competitive prices.

Integrating new technologies with the old

ICT has also integrated old technologies with the new and radio is the most widely used ICT in the modern world. In rural areas, almost every one owns some sort of radio can access information in various languages.

Panos Southern Africa has been running women's' listening clubs in rural areas where the women groups have been given wind-up radios and produce programmes which are aired on national radio.

And One World Radio Africa, an online radio component of OWA has partnership with community radio stations and NGOs who produce audio content. OWRA brings this community of audio producers on a common platform where they share audio content on the internet as well as allowing others to listen to audio clips from around the continent on issues concerning human rights and sustainable development and this is an incorporation of new technologies with the old.

Localisation of ICTs

While ICTs are increasingly being used in development, research has shown that more needs to be done to make them affordable and easily accessible.

Government and the international community therefore need to help bridge the gap that exists in the digital divide.

MIND



ICTs: catalyst for enhancement of Zambia's informal sector

By Bruce Kaunda

In 2002, a group of widows and former workers gathered at the Church of Christ in Ndola's Kawama Township on The Copperbelt of Zambia to forge a way forward on how they could help contribute to the reduction of the escalating poverty levels in the compound. A group of 17 men and women discussed what avenues they could employ to help residents have an income to sustain them and take children to school. From this meeting, a business idea was developed. From this modest gathering, the Ndola Resource Centre (NRC) was born and today, it plays pivotal role in helping residents to earn an income for their day to day living, among other important issues. It was during this same meeting that the gathering elected a chairman for the group which today boasts of about 60 members.

Mr Jairos Samushi, who attended a seminar for Small Industries Development (SIDO) at Lutanda in Kitwe, in 1986, realised that time had now come for him to put what he learnt some years ago into practice for he was now made chairman of the NRC. The seminar that Mr. Samushi attended a few years ago was aimed at teaching people on how they could survive and help the community in the event that they no longer worked in the formal sector. The idea that the group came up with was that of having clay soil as their capital and from this soil, different types of products would be made and later sold. The income realised was to be shared amongst them. The idea also involved the making of bricks to sell for members to earn a living besides making roofing sheets using simple hand-made machines, and this has paid off. However, NRC had some difficulties in sourcing for funding and at one point tried their luck with Micro-project, a financing company but the promises yielded nothing. From the knowledge Mr Samushi acquired during his 21 days of attending the seminar in Kitwe, simple machines, including those used to make roofing sheets were made. Other machines included that of making ceramic products, which include plates that are sold to tourists especially in Livingstone.

Speaking in an interview, one of the people involved in the project, Astridah Muke said the centre had benefited the community because from the time it started its operations, a lot of people had set up their own businesses and in turn employed others from within the community. *"We have benefited from this project because from the little money we get from the products we sell, we are able to send children to school and also provide enough food for our families"*, Ms Muke said. Another beneficiary, Fostina Mubanga said the project has brought hope for the Kawama residents and that it came at a time when

widows in the Township had nowhere to turn to for help. *"This is something that we have received with both hands and we shall ensure that other people benefit from the project just like we have done"*, said Ms Mubanga. The project has not left out the youth in the area, majority of who have now to set up their own businesses especially in bricks. Two youths, Moses Pakamisha and William Phiri welcomed the idea saying it has helped to keep young people out of mischief. The duo said they were able to make over 250 bricks per day while two women involved in the same trade boast of moulding 80 bricks. The high rate at which houses are being constructed in Ndola provides a ready market for the bricks. The centre has also managed to construct a kiln in which the bricks are burnt

Through NRC's participation in a project called The [YES Network](#), a coordinator of one of the projects in Zambia, Edwin Zulu, learnt about them and linked them to a Netherlands-based organisation IICD, which works in partnership with international stakeholders in ICTs and development, among others. The coming in of IICD initially gave little hope to the centre, but things may just change for some people especially that funds were provided to facilitate for certain eminent needs at the centre. About Euro 4750 (ZKw28m) was granted to include two computers, re-wiring of the centre and reconnection to electricity, connection of phone lines, Internet reconnection, basic ICT skills training and two months recurring costs for phone bill and electricity bills. The re-wiring and electricity cost more than was budgeted for resulting into an extra ZKw 4,500,000 being provided by IICD. In addition to that IICD contributed a digital camera.

All that was provided was designed to be used by the centre to establish an Internet café to provide an extra income for it to continue running and to support the centre's own activities. The infrastructure where the centre stands involves an old building, which used to be a government FRA (Federal Railroad Administration) storage facility, and in this building, women and youths are trained in different disciplines such as bricklaying, and making ceramic products, which are later sold to tourists. Mr Samushi said the centre was also involved in making plates and that the only hurdles it was facing was the money to buy chemicals to make their ceramic products compete with those from well-established companies.

According to Mr Samushi, the installation of computers was being delayed by lack of electricity in the building and now that money has been paid towards the same, the computers would soon be installed. The work at the centre is laborious and slow and most of the equipment used is home made, but the women and youths have no choice but to eke a living in that tedious conformity. And so it comes as something of a miracle for these people to be given a chance to use computers, The Internet and a digital camera, which in a developing country like Zambia are a preserve of the elite.

Mr Samushi said the community was thrilled with IICD's contribution. *"It's like a dream come true for some and a miracle for the majority. In fact, the number of those enrolled is swelling as a result of this and I think soon, we won't be able to contain the numbers"*, he said. For now, the centre is training 40 women and 20 youths but a random survey shows that a number of people are getting interested. Mr Samushi said information technology was vital in today's living and that this was the reason why IICD would be sending two trainers from their training partner Coldreed Training to Ndola to train the would-be trainers. *"We are grateful to IICD for coming to our aid. From the time we started this project, IICD is*

the only organisation that has seen the importance of what we are doing", Mr Samushi said. He said women have also benefited and that they were always coming in numbers especially with the coming in of IICD. Mr Samushi said with the issue on gender becoming hot, it was felt that women be given the opportunity to help themselves in their day-to-day living.

Most of the people at the training premises, expressed joy at the contribution which they said would help them improve their livelihood and help the community in various ways. Said Millicent Chitengi, who is one of the administrators: *"I don't know how I can thank IICD for providing the computers and digital camera. Information technology is vital for community development and I think this is just the beginning."* As a money-spinning venture, the NRC chairman said the charges to be set by the centre would be minimal for the community to afford but also enough to help the running of the centre.

In Kawama, like most of Zambia's high-density residential areas, there is one burning issue the HIV/AIDS pandemic. In this regard, the NRC intends to produce pamphlets on HIV/AIDS so that the community could have literature about the deadly disease. *"Since a large number of people do not know how to read English, we intend to produce pamphlets written in our local languages to enable them understand the dangers of HIV/AIDS,"* said Mr Samushi.

To the uninitiated, the donation may seem like just another good gesture but in reality, it amounts to an immeasurable thrill for the locals. Asked on the future plans of the project, Mr Samushi said it would continue with the current activities especially that some students were being returned to help the project continue. He also called on other donors and other organisations to help small businesses like the one they were in, adding that most of them just concentrated on helping in health areas. *"Our aim is to continue with this project and we could appreciate if organisations that are helping in the fight against HIV/AIDS could come to our aid as well,"* Mr Samushi said. He said with the efforts the community was putting in, the coming in of any other helpers would be an added advantage to the sustainability of the project. Samushi added that the community would do everything possible to ensure that the centre survived and continued to help the community.

For more information, please contact Mr Samushi JSAMUCHI@YAHOO.COM



MIND Partners in Information Networking

- IICD
- Oneworld Africa
- e-Brain Forum of Zambia
- Coldreed Training
- Zard
- MISA-Zambia
- Panos Southern Africa
- Computer Societies of Zambia
- Communications Authority of Zambia