

# advocate (the

vol 2 issue 1

this issue is devoted to the ICT4D in Africa plan, focusing on Computers for Cameroon project.

# Tools of empowerment

This article was originally published in the Daily Gleaner Monday January 12th, 2009

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Your old computer could have a new life in Africa.

Michael MacKinnon wants to refurbish old computers and send them to Kumbo in Cameroon, Africa. Computers for Cameroon is a mini pilot computer collecting and recycling project and an empowerment mission being taken on by MacKinnon and Emmanuel Sevidzem, who lives in this African country.



The Daily Gleaner/James West Photo

Michael MacKinnon, a computer programmer in Fredericton, wants to refurbish old and even broken local computers and send them to Kumbo in Cameroon, Africa.

Computers for Cameroon is a mini pilot computer collecting and recycling project and an empowerment mission being taken on by MacKinnon and Emmanuel Sevidzem, who lives in this African country. Their mission is to transform landfillbound computers here into empowerment tools for people who live there.

Most people in Cameroon don't have computers. There are a few cybercafés but not many. Often they are not up and running either because of power outages, because the café operators can't afford to pay the power bills or because of computer malfunctions. Sevidzem wants to make things better for his community.

Computer access would empower the people of Kumbo to get out of poverty and help create wealth, Sevidzem says. He calls this a great project of hope that will bridge the digital divide between wealthy nations such as Canada and developing countries like Cameroon.

Throwing away computers is a waste when others in the world can use them,
MacKinnon agrees. It's also bad for the environment, he points out.

"There are toxic substances in computers such as lead and mercury."

MacKinnon has been a computer programmer since the early 1980s. He's always wanted

to combine his IT skills with a development project.

This effort started a year ago. At that time MacKinnon went to the United Nation's website in search of volunteer opportunities. He was surprised to discover it's possible to volunteer in variety of ways from home.

"It can range from translating documents from one language to another to writing research papers. Not all projects are ITrelated."

It was then that he discovered this need for computers in Cameroon. He started to correspond, by e-mail, with Emmanuel Sevidzem who is the founder and managing director of TechCeFaCosa which is a nongovernmental agency in Kumbo, Cameroon.

Sevidzem is thrilled that MacKinnon is willing to help.

"Michael MacKinnon is a highly educated man of vision, hoping to make changes in the life of Africans."

To start this project, MacKinnon needs about five computers or the parts to build computers from computer parts.

Now that his children are grown, he says, he has more time to give. He's always



wanted to use his IT skills to help others in the developing world. He is excited to work on this project.

From his basement, MacKinnon says, he can do this work in his spare time.

"It starts with cleaning the keyboard, making sure it has no dust. Replacing

components, taking the hard drive and wiping it clean to make sure there is no memory left on it. Then you put in a new operating system and new software.

"One of the things we would like to do is install educational software on things such as HIV prevention and agricultural practices but the software that's needed will be determined at the local level."

The computers that are now being used in Cameroon are very old. They date back to the mid-1990s.

"In the computer world a decade is like 100 years to the automotive industry. Things change so rapidly. A lot of the computers over there will not run programs such as Windows Vista or Windows XP."

Non-governmental organizations, such as the one Sevidzem runs in Kumbo, don't have the money to continuously buy the latest in computer programs. So MacKinnon is learning about a computer program called Linux that is free and can be adapted to suit the needs of those who use it. This computer program was created by software developers who don't believe in profiting from what they create.

Once these computers are ready then MacKinnon has to find a way to get them to Africa so the people in Kumbo can connect with the rest of the world. He is hopeful that a charitable organization would be willing to transport them to Cameroon.

Sevidzem has a greater plan. He wants to create a computer telecentre where people in the area could go to use computers and connect with the rest of the world through the Internet.

MacKinnon plans to work with Sevidzem and this organization until the telecentre is operational. He expects this could take a couple of years.

"When we set up the computer telecentre we want to train IT personnel so they can do the repairs so this is self-sustaining."

Sevidzem has invited MacKinnon to come to Cameroon to work with him. MacKinnon sees a time when he will go to Kumbo to work side-by-side with Sevidzem on this project.

"He is excited. I am too. It's something I really enjoy doing it. It's fun. I'm looking forward to seeing something

concrete happen. His enthusiasm shows just how pressing the need is."

Currently MacKinnon works on contract. Soon he will turn 50. He is thinking about what he wants to do with the rest of his life. His dream, he says, includes doing this full-time.



"If I could spend the rest of my life working exclusively on this I would be happy. I like the idea of being able to use my skills to improve the conditions of other people's lives.

"I've always been an activist. I feel strongly that those of us in the western world have an obligation to help others in the developing world.

"The resources and wealth need to flow in the opposite direction. It's time to give back."

MacKinnon says North Americans should never take a paternalistic attitude towards what's needed in developing countries.

He says we need to continuously remind ourselves that we shouldn't define the needs of people in Africa or come up with solutions. This needs to be the decision of those who live in these areas.

MacKinnon says he is simply lending a hand and his IT skills to make this happen.

"I think long-term, we see this project as being a model for other communities in Africa."

For more information, go to http://www.techcefacos.org/ or contact Michael MacKinnon at irishcrows@gmail.com

# And now some blog entries...

## Getting started on CfC

- Posted by <u>Michael MacKinnon</u> on February 14, 2009 at 11:30am
- View My Blog

I had hoped to start out with an initial 4 or 5 PC's for Emmanuel, to get the telcentre up and running. But a local paper picked up on the story and I have had a flood of offers, including a donation from the University of New Brunswick, the local university. We currently have 34 PC's and a Power Mac. There are probably another 1 to 15 on their way, which means we will have around 50 PC's. And we have printers, a fax machine and scanners. This will allow us to also start setting up the ICT Institute for English Cameroon.

A common theme is that people have been holding on to their old PC's because they don't want to just dump them in a landfill. So not only does this help TechCeFaCos and Emmanuel, we're also helping the environment.

Now the hard work comes. It takes about 5 hours to configure a PC properly with a dual boot for Windows XP and Ubuntu Linux. And that is without networking it to a Linux server, or being able to access Windows shares on an XP server.

But I am learning lots of Linux.

More to follow, as well as photos.

#### More PC's

- Posted by <u>Michael MacKinnon</u> on March 1, 2009 at 1:12pm
- View My Blog

We are now close to 45 PC's plus extra equipment. My basement is filing up with monitors, and more to arrive on Wednesday. In the end we will have an extra monitor for each system. Pretty cool! And there are more systems to pick up.

This is all pretty exciting, and I'm learning lots about Linux (perhaps there's a song in there.)

And yet, with all this technology I just can't seem to get my hands on a digital camera. Want to post some photos.

That's it for now, back to the server and Linux!

#### **Progress**

- Posted by <u>Michael MacKinnon</u> on March
   9, 2009 at 8:30pm
- View My Blog

So far I have 27 of the PC's setup, and continue to work on them. In addition, I am working on some of the ideas Emmanuel and I have discussed through Gmail chat.

But tonight I took a break, scrounged up a digital camera and have some photos to post. But I need to reduce the resolution for better performance on the net.

Stay tuned!

Michael

Have the photos, so adding them to this post.



Ready to join the others already completed.



Waiting for their turn.

# PC's and drywall

- Posted by <u>Michael MacKinnon</u> on March 15, 2009 at 10:02am
- <u>View My Bloq</u>

Whew! Talk about long days.

Work all day at the construction site and then on the PC's at night. I sleep at night dreaming of computers and drywall. Need to start reading or something before going to bed.

I am almost finished the first phase of working on the PC's. Soon I need to network them to the Ubuntu Linux server I have set up. As much as I like Linux, and prefer it overs Windows, networking Windows clients is a lot easier than Linux clients. Then again, I am new to Linux and an old hand with Windows.

I have received more offers of equipment and so will hopefully be picking up more this week. It quite amazing, people are so happy to donate old PC's and keep them out of the landfill. And the city I live is really quite small. I can just imagine how

much success we would have in a place like Ottawa which is so much larger. Gives me some ideas!

That's it for now, back to the PC's and my marinating tofu.



## Linux Upgrade

- Posted by <u>Michael MacKinnon</u> on April 29, 2009 at 8:31am
- View the Blog

Well, I had all the PC's loaded with Windows XP and Ubuntu and along comes Ubuntu 9.04. Completed the last of the upgrades last night, now onto the server. I've attached a photo my daughter took of the latest tower of power.



Today begins the networking of the PC's. So far I have a completed Win XP network, but also want a Linux one as well.

And I need to complete some funding proposals for shipping and my visit to Cameroon, as well as setting up some partnership/sponsor relationship here in Canada.

A final note, projectEDUCATE asked about disposing of the equipment once it can no longer be maintained. A very good question, because although we have temporarily extended the usefulness of these PC's and kept them out of landfills, eventually that is where they will be headed for. As part of this project we have to ensure that they don't end up in a landfill anywhere. I'm wrestling with that issue right now.

And now, back to Linux...

#### Scored a server

- Posted by <u>Michael MacKinnon</u> on May 28, 2009 at 8:49pm
- <u>View the Bloq</u>

A local college really came through today.

They donated 5 PC's and a server, complete with a RAID 6 5 hard drive system. (Will have some pictures of that pretty soon.)
They will also be donating some hubs and network cables. And they also have some equipment in Moncton which we will be picking up in July.



PC as plant stands?

In the meantime, space here is running low and the equipment is beginning to share space with a vacuum cleaner and other household items. Two are even doubling as plant stands (we water the plants away from the PC's!!)

#### 0ops

- Posted by <u>Michael MacKinnon</u> on July 22, 2009 at 5:04pm
- <u>View the Blog</u>

I've been a bit remiss in keeping this blog up to date. Tend to get sidetracked, particularly with the wait for my granddaughter's birth. She's here now, a healthy 8 lbs, 12 ozs.

Anyway, enough of the personal notes.

This week we are getting more systems, which will bring us to about 60 systems. I've been experimenting with Damn Small Linux (DSL) and its really cool. With it I can even get some old pre-Pentium 486's running, which allows me to reclaim 4 or 5 old PC's that have been donated. Maybe even a couple of laptops.

Emanuel had a good idea. He suggested packing the PC's in boxes using clothing as a packing material. Apparently the clothing wold be another useful item. So, when I head off to Ottawa I'll be checking into some places I know that have lots of used clothing they give away.

Its time to head back to DSL.



Will this puppy run?

#### Running out of Space

- Posted by <u>Michael MacKinnon</u> on July 29, 2009 at 7:18pm
- View the blog

The University of New Brunswick just keeps on coming through. Last week 8 PC's and 2 laptops. This week 10 more PC's and they have another 20 or so for next week.

I've really come to like Damn Small Linux. Such a small footprint and quite robust. It even runs Open Office! Networking is also quite easy, and I like the fact it has Samba built in and easy to configure.

Thought I would upload some more photos as well.

Soon I should have some updates on the fund raising, and will float some ideas I've been reading about. Looking forward to some feedback on those.

the continental divide

i've traveled the great divide

between misery and luxury sidles down the side of rockies into the state of despair abandoned farms dotting the wyoming countryside giving way to progress and the vast reaches of corporate farms free roaming ranges of sage and scrub brush fenced in for the few gashed by asphalt and railway

there's money out there i've seen it in the lakeside cottages that could house your family and mine in the suv's that ignore me on the highway in the gas that feeds those suv's

there's poverty out there too i've seen it. slip through a town and the homeless are there scrabbling for a fix or a meal the hate filled graffiti that rises out of frustration and anger neighborhoods that become nighttime war zones

i've traveled the great divide watched as with time it grows

and the middle fades on one side the anger the other insular greed i await the end the inevitable violence and mourn the death of a dream a dream to young to die too tired to carry on

i've traveled the great divide slid down into this state of sadness

and cried

advocate (the) is published by michael mackinnon and is part of the African sustainable development efforts of the irishcrows development foundation.

"The measure of a society is how it treats its poor."

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