

VOICES

SHARING IDEAS, GROWING SOLUTIONS.



The newsletter
for partners of
Developing
Countries Farm
Radio Network

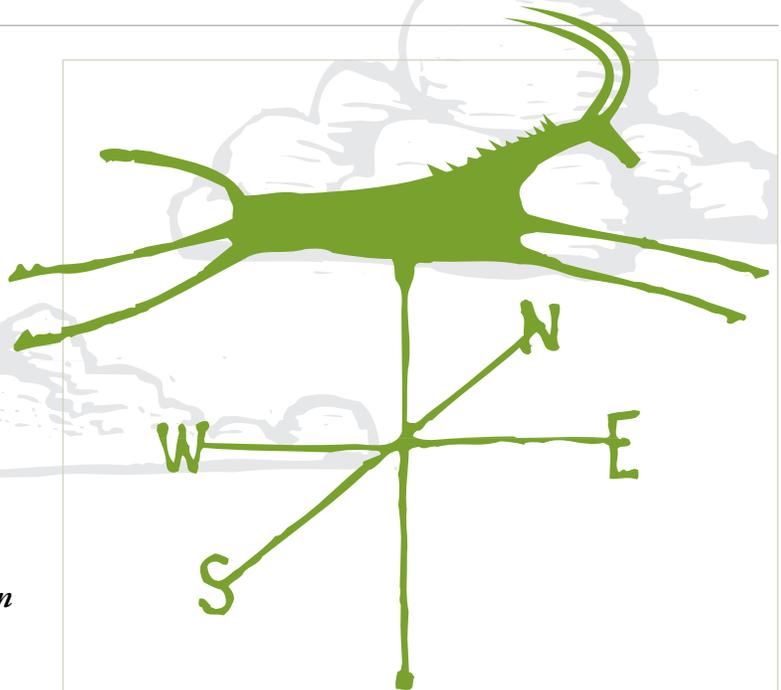
June 2005, NO. 75

TAPPING INTO FARMERS' TRADITIONAL SYSTEMS OF FORECASTING DROUGHT AND OTHER ENVIRONMENTAL CHANGE

*Farmers are listening to you,
but are you listening to them?*

Are you listening to what local farmers are saying about the weather? Will the rains be plentiful? Or does drought loom ahead?

Through years of practiced observation farmers have developed traditional ways to forecast environmental changes. By using indicators such as the flowering time of certain trees, the direction and speed of the winds, and even insect behaviour, farmers monitor and predict changes in their surroundings. These types of 'grassroots indicators' are often an informal early warning system for drought and desertification. There is a lot to gain by disseminating this kind of local knowledge through radio broadcasts. This information can help farmers make more informed decisions about when to prepare land and planting materials and how much excess food to store. It is one way to help families and communities become more resilient to environmental change.



Birds and insects are two of the most important categories of "grassroots indicators" for the Langi people of Northern Uganda. The appearance and activity of birds and insects inform people's farming activities and their strategies to maintain household food security. For example, the appearance of okwiji birds shows people that this is the right time to prepare the soil for cotton. This bird usually comes between the months of May and June when the millet crop is ripening and interplanting of cotton takes place.

Source: *Grassroots Indicators for Desertification*, IDRC, 1996, www.idrc.ca/en/ev-30839-201-1-DO_TOPIC.html

Continued on page 2

Continued from page 1 — *Tapping into...*

THE AKAMBA PEOPLE from Kivingone village, in the Machakos District of Eastern Kenya, are an example of one community that uses grassroots indicators to forecast environmental change. Over time the people of Kivingone have developed indicators to monitor soil types, cropping patterns, and the start of drought. They use these indicators when making decisions about how to manage their land. The following table shows how signs of drought such as particular insect and plant behaviour and weather conditions are linked to agricultural production and other activities.

Issue	Indicators	Expected action by community
Drought	Flowering of <i>Kivingo</i> tree, which usually never buds	Start storing food
	<i>Kinguthe</i> plant flowers before any other plant	Grow drought-resistant crops
	Plants turn yellow, wither and die	Buy grain from those who have harvested and store
	Appearance of cold, light mist called <i>miki</i>	Transfer cattle to relatives who live on fertile lands
	Dry, cold and fierce winds sweep across the land	Migrate to empty government lands (<i>Syengo</i>) or employ herdsman, send them with cattle to these lands, and check on them frequently
	Very cold nights	Stock cattle pastures
	Increase in diseases such as measles, and appearance of numerous insects which destroy crops	Unthatch rooftops for cattle feed Sell cattle and farms to buy food Some men run away, leaving wives and children behind Men migrate to seek employment elsewhere to feed families Women make ropes and weave baskets for sale Group formations increase, kinship affiliations and friendships are strengthened, as people grapple with problem of survival

Source: Akamba land management systems: The role of grassroots indicators in drought-prone cultures, IDRC (http://web.idrc.ca/en/ev-30838-201-1-DO_TOPIC.html)



In Burkina Faso farmers' interpretation of wind patterns recognize the ocean as the origin for rain. During the dry season, farmers expect winds to blow westward, that is, to go to the ocean to pick up water, and then return blowing eastward at the onset of the rainy season. Farmers predicted and explained drought from the absence of such winds.

Source: *IK Notes*, www.worldbank.org/afr/ik/iknt39.pdf

Unfortunately much of this kind of local knowledge and information has not been used to its best advantage. In fact it may be ignored by scientists and not incorporated into formal early warning systems. There are exceptions however. As part of the Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS), being coordinated by the FAO, Tanzania implemented a system whereby individual villages keep log books to collect information on agricultural production. This information is then incorporated into the larger early warning system.

In any case, there is an important opportunity for broadcasters to learn about and share farmers' indigenous knowledge. Do you have an experience to share about how you took grassroots indicators into consideration when discussing weather conditions and forecasts? Who in your community has shared their knowledge about local environmental change and helped others to improve their response to the threat of drought and desertification?

Information sources:

Grassroots indicators for desertification: Experience and perspectives from Eastern and Southern Africa, Edited by Helen Hambly and Tobias Onweng Angura, IDRC, 1996. http://www.idrc.ca/en/ev-9320-201-1-DO_TOPIC.html

- Akamba land management systems: The role of grassroots indicators in drought-prone cultures (Wilhelmina Oduol), http://www.idrc.ca/en/ev-30838-201-1-DO_TOPIC.html
- The use of trees, birds and animal behavior as measures of environmental change by the Shona people of Zimbabwe (Claude Mararike), http://web.idrc.ca/en/ev-30850-201-1-DO_TOPIC.html

Early warning systems: Forewarned is forearmed, Spore, April 2005, No. 166. <http://spore.cta.int/spore116/spore116.pdf>

Indigenous knowledge in natural disaster reduction in Africa, The Environment Times, UNEP, 2004. <http://www.environmenttimes.net/article.cfm?pageID=132>

Burkina Faso: Integrating indigenous and scientific rainfall forecasting, *IK Notes*, No. 39, December 2001.

Preparing for THE YEAR OF DESERTIFICATION

With the Year of Desertification approaching in 2006, the Farm Radio Network is devoting the next few packages to the theme of preventing desertification.

DESERTIFICATION refers to the degradation of drylands. This involves a loss of biological diversity and economic productivity in croplands, pastures and woodlands. It is caused mainly by climate variability and unsustainable human activities, especially overcultivation, overgrazing, deforestation and poor irrigation practices.

Desertification has huge impacts across the globe, and is most devastating in Africa. By undermining the capacity of the land to produce, it contributes to poverty. More than a quarter of a billion people are directly affected, while the livelihoods of more than one billion people, many of them among the world's poorest, are threatened. Fully one-third of the earth's land surface is at risk from desertification. If desertification is not stopped and reversed, crop yields in many affected areas will decline. Malnutrition, starvation, and ultimately famine may result.

THE FARMERS' ROLE

The actions of small-scale farmers are clearly central to solving the problem of desertification. As those most directly involved with managing the land, farmers have valuable experience and a special understanding of their local environment. Knowing that drylands are easily damaged, farmers over time have devised strategies that protect the land, such as shifting agriculture and nomadic herding. In recent decades however, changing conditions have made some traditional strategies impractical, and farmers have struggled to respond to new situations. Some have adapted well; there are many success stories. Building on existing knowledge, farmers sometimes collaborate with governments, technical specialists, non-governmental organizations and other farmers to creatively solve problems. For example, Local Level Monitoring is a tool developed in Namibia to improve land management. It's based on monitoring indicators that farmers themselves have identified such as livestock conditions, rainfall, rangeland conditions, carrying capacity and bush density.

BROADCASTERS HAVE A KEY ROLE TO PLAY IN SUPPORTING FARMERS

Broadcasters can:

- Disseminate information on useful and harmful farming practices;
- Spread the news about the negative social and ecological impacts of desertification;
- Sow hope and encouragement by publicizing success stories;
- Help empower farmers by validating the fact that traditional knowledge and stewardship play a vital role in fighting desertification;
- Provide a forum for information exchange on practical methods for protecting the land;
- Engage individuals, communities, organizations and governments in a dialogue about how to manage natural resources;
- Provide information that demystifies new technologies and programs;
- Present government as a co-stakeholder, interested in collaborating with communities and individuals;
- Connect farmers with other farmers, non-profit organizations, funders, and other support;
- Let farmers know that desertification is a worldwide problem and they are not alone in the struggle;
- Empower farmers by giving them a chance to speak and to share their own ideas.

The scripts in our desertification series, including the ones in this package, will present a range of techniques, approaches and ideas about dryland agriculture, drought and how farmers can slow or prevent land degradation. The scripts in package 75 have been contributed by partners all over Africa and they include:

- A school in South Africa harvests rainwater from the roof
- The slow march of the Kalahari: What are appropriate uses for land?
- How mulch protects the soil
- The importance of local knowledge about environmental change
- Farming techniques used by an organic farmer in Kenya
- Preventing land degradation



Anthony Lwanga of Kagadi Kibaale Community Radio gets feedback from farmers about radio programs that discuss agricultural research topics.

LINKING AGRICULTURAL RESEARCH AND RURAL RADIO IN AFRICA — AN UPDATE FROM UGANDA

In July of 2002 eight teams from Ghana, Uganda and Cameroon participated in a workshop in Kumasi, Ghana. Each team included an agricultural researcher, a radio broadcaster, and an extension worker or someone associated with a local NGO. The workshop was part of a project called Linking Agricultural Research and Rural Radio in Africa (LARRRA), and was jointly coordinated by the University of Guelph, Developing Countries Farm Radio Network and the International Service for National Agricultural Research (ISNAR). Each team was asked to develop an action plan using rural radio as a tool to communicate agricultural research to farmers, and to seek feedback from farmers.

Three years later the team from western Uganda, consisting of Anthony Lwanga (Program Manager, Kagadi Kibaale Community Radio), Peter Sentayi (District Agricultural Officer, Kibaale District), Dr. Rogers Kanzikwera (Centre Manager, Bulindi Agricultural Research and Development Centre of the National Agricultural Research Organization (NARO)), continues to supply information about agricultural research to farmers via radio. Although the team has yet to receive any external funds to support their activities, they have found that through collaboration they are able to address the aims of each of the three institutions. The agriculturalists have their research results disseminated and receive feedback from farmers, and the radio broadcaster is able to provide pertinent agricultural information to listeners.

The radio programs are produced jointly by all three members of the team. Mr. Sentayi and Dr. Kanzikwera travel to the radio station to work with Mr. Lwanga. The three also work with farmer listening groups in the district. After a program is aired they visit the listening groups to get feedback. Farmers say they appreciate the information they have received about improved varieties of beans, sweet potato and cassava. Farmers also mentioned that they would like to learn how to control banana bacterial wilt – a disease affecting banana production in Uganda.

*LARRRA is currently underway in 6 francophone African countries. A workshop took place June 6-10 in Dakar Senegal with seven teams from West and Central Africa – more will follow about this workshop in the next issue of **Voices**.*

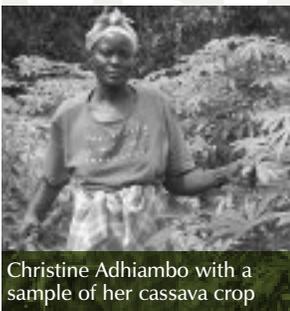
Partner PROFILE

UGUNJA COMMUNITY RESOURCE CENTRE

UGUNJA COMMUNITY RESOURCE CENTRE (UCRC), based in Siaya District in Western Kenya, recently became a Farm Radio Network partner and contributed a script to the March package about agroforestry. UCRC started in 1992 as a community based organization by a group of women farmers. They created a small library of farming information in Ugunja town for the use of local people. Over the years this library expanded to include information on health and disability issues. According to Aggrey Omondi, UCRC's director, positive change and sustainable development should come from community members themselves. "I wish to see a community that is more informed and equitable so that resources are shared, information is flowing freely and people are empowered," says Omondi. "UCRC's aim is to facilitate this without losing the vision of the community."

UCRC plans to start a community radio that will broadcast in the local language, and ensure that community voices are heard. The radio station would complement the work being carried out by the 15 learning centers UCRC has established throughout the district where community members can seek information from the books, volunteers and computers there.

Before the radio station is operational, UCRC hopes to produce audio tapes by interviewing elders on certain topics. The tapes will be sent to the learning centers where they will be used by local listening groups. "Elders in the district have a wealth of knowledge, and UCRC sees the value in documenting that knowledge," says Omondi. "This way the knowledge will not be lost and when we get our community radio station we would also have some programs ready to air."



Christine Adhiambo with a sample of her cassava crop

Christine Adhiambo is a member of one of the farmers' groups supported by UCRC. Her group, consisting of 30 women and men, pays 500 Kenyan shillings a year for membership. Christine often attends seminars sponsored by UCRC and then shares what she learns with the rest of her group. Through the UCRC she has

learned techniques for increasing production of sweet potato, cassava, maize and sorghum. For example, she now plants her crops in lines rather than broadcasting them (tossing the seeds onto the soil). The difference she sees is that the plants don't compete for nutrients and production has increased.

Belonging to this group helps to reduce her workload. For example, one day people from the group will come to her farm and help her with her crops, another day they all go to another group member's farm and so on.

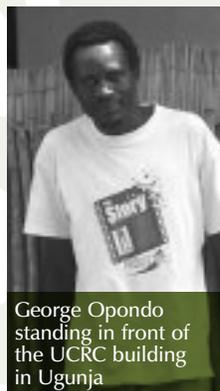
Future plans for her group include bulking cassava for rapid multiplication, rearing poultry, and planting sweet potatoes for both vine and tuber production.



Josephine Atieno with a tree called leucaena (*Leucaena leucocephala*) that is being promoted by UCRC. The tree provides fodder, fertilizer, and firewood

Josephine Atieno also belongs to one of UCRC's farmer groups. In 2003, when traditional varieties of sweet potato and cassava were being ravaged by insects and drought, UCRC helped her group obtain clean, certified sweet potato and cassava planting materials which helped increase yields. UCRC also helped her group to get involved in agroforestry. The women are planting trees to replace ones that have been used for charcoal. The trees they are planting are multipurpose such as *Leucaena leucocephala*

which provides fodder for animals, is a natural fertilizer, and can be used for firewood. Josephine hopes that UCRC will support her to get a dairy goat, since she has learned how to cultivate and manage a fodder plot.



George Opondo standing in front of the UCRC building in Ugunja

George Opondo has been an organic dairy farmer since 1992. Being organic means his cows get feed that has not been sprayed with chemicals and he treats them with herbal remedies rather than antibiotics when they are ill. According to George, other farmers are beginning to see that it's affordable to raise organic dairy cows since there are few, if any, veterinary costs. George learned about organic agriculture from books at the UCRC library. He is one of UCRC's contact farmers which means

that he receives training on sustainable agriculture and shares what he learns with other farmers in the district. Visitors come to his farm to see his crops, herbs and animals. George also preserves plants that are in danger of disappearing by bringing them to his farm and growing them there.

AFRICAN COMMUNITY RADIO STATIONS CONVERGE IN NAIROBI FOR AMARC CONFERENCE

Community Radio Stations Join Farm Radio Network.

Every three to four years community radio station representatives from all corners of Africa converge to celebrate community radio's vital role in grassroots development and to exchange ideas about how their medium could be made more effective. This dynamic event, which combines different languages, cultures and traditions took place in Nairobi, Kenya from April 18-23, 2005. The conference was coordinated by AMARC Africa — the African body of the World Association of Community Radio Broadcasters. AMARC Africa aims to promote human rights, demonstrate community radio's role in alleviating poverty and promoting social development, and advocate for community radio at both the national and international level.

AMARC Africa currently has 385 member community radio stations. Some Farm Radio Network partners from West, Central, East and Southern Africa belong to AMARC Africa and attended the recent conference in Nairobi. Several AMARC conference participants signed up to be Farm Radio Network partners at the event and we welcome them to the Network! (See next column for these and other new partners.)

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WELCOME TO NEW NETWORK PARTNERS!

We look forward to the innovative ideas, experiences and knowledge our new partners will bring to the Network. The new partners are:

- **Radio Mang'elele**, 89.1 FM – Kenya. Kenya's only community radio station.
- **Radio Yangeni** 98.2 FM – Zambia. A community radio station that produces programs on subsistence farming.
- **Radio Timtimol**, FM 91.9 – Senegal. A community radio station that broadcasts to farmers, fishers, livestock rearers, and women's groups.
- **Radio Maendeleo**, 88.7 FM & 98.7 FM – Democratic Republic of Congo. A community radio station created in 1993 by local NGOs to promote community participation and to disseminate alternative information.
- **Eastern Radio**, FM 101.9 – Sierra Leone. A community radio station initiated by a national NGO called Network Movement for Justice and Development. The station aims to provide a platform for community members to discuss issues affecting them.
- **Radio Bio Guerra** – Benin. A community radio station
- **Ndef Leng FM**, 93.4 FM & 93.5 FM – Senegal. A community radio station initiated by the NGO Ndef Leng.
- **Radio Daetsrifa** – Ghana. A community radio station initiated by the Culture in the Neighbourhood Program in Pokuase, a small village near Accra.
- **Radio Simba**, 102.7 FM – Kenya. A commercial station in Nairobi that airs programs on agriculture, business, health, politics, entertainment etc.
- **Guinea Rural Radio and Press Network**. A media network of fifteen radio stations, whose aim is to promote local communication.
- **Association Presse Jeune** – Cameroon. An NGO that works with youth and aims to promote their participation in communication for social change.
- **Women Information Network**, 92.8 FM – Nigeria. An NGO focusing on media and programs for women and youth in particular.
- **Radio Tanzania Dar-Es-Salaam** – 93.3 FM. Tanzania's national radio station.
- **Econews Africa** – Kenya. An NGO that supports the establishment of community radios and community resource centers in East Africa.



Evans Oma Hunter of Radio Daetsrifa, Ghana, is one of the new partners who joined the Farm Radio Network at the AMARC conference.

- **Radio FIDEMIEL** – FEN – Rwanda. A community radio station in rural Rwanda that promotes information and education to help farmers and the environment.
- **Radio Gabi**, 95.0 FM – Niger. A solar-powered, low frequency FM community radio station.
- **Media and Technology** – Benin. A media organization that edits the journal Agri-Culture and produces agricultural radio programs.
- **Radio Lepin**, 97.3 FM – Ivory Coast. A community radio station in Alepe Department.
- **Radio Zermou** – Niger. A community radio station in the Zinder region.
- **Radio Dantiendou** – Niger. A community radio station in the Tillabery region.
- **Biyen FM de Mont-Rolland**, 103.3 FM – Senegal. A community radio station.
- **Radio Jokkoo FM**, 87.7 FM – Senegal. A community radio station in Rufisque.
- **Kachwekano FM**, 107.3 – Uganda. A community multi-media center in southwest Uganda.
- **Rural media network** [Réseau de Réalisateurs et Journalistes pour population et Développement] – Benin. An association that encourages discussion about development issues.



Watch out for our script writing contest

With support from UNESCO, the Farm Radio Network will be hosting a script-writing competition with the theme of the UN Millenium Development Goals (MDGs). We will be asking partners to prepare scripts on topics such as gender equality, combatting HIV/AIDS, malaria and other diseases, and ensuring environmental sustainability.

Over the next couple of months we will send you a package of information that will include details about the competition (including script length and deadlines) and a special CD Rom with examples of Farm Radio scripts that relate to the MDGs. Once you receive this package, let us know if you would like to participate and we will wait for your submission.

Stay tuned for more information...



THE AFRICAN WOMAN

Aaron Kah of Radio Oku in Cameroon is an active partner and contributor to 'Voices'. Last March, on International Women's Day, Aaron broadcast a special program devoted to the topic of women and their burden of responsibilities. The following are excerpts from his broadcast.

"The picture of the African woman is always painted like that of an octopus with several hands doing so many things at the same time. Female empowerment experts have designed a picture of an African woman with a baby on her back, farm basket on her head, some of her hands hoeing the soil, cooking, washing with the baby on her back, fetching water, taking care of her husband and many other duties."

"This is to show how committed she is and the important role she plays in the society. It is this enormous function that gives her personality. In spite of her important role, she is sidelined in decision-making concerning herself, her family and community. She is marginalized in the matters of education, job opportunities and access to health."

"In Cameroon and Africa as a whole, the socio-cultural and economic situation of the rural woman is far from satisfactory and begs for atonement. While the world is fast modernizing, it is sad to note that the status of the rural woman in Cameroon has undergone very little or no positive evolution. She remains a victim of certain negative cultural practices and beliefs."

"Most African traditions refuse the rural woman the right to inherit or acquire property. Many are refused the right to work because of marriage. They are simply viewed as the private or personal property of the man. The rural woman cannot freely get into an employment without the husband's permission. She circulates between the farm and the kitchen, her principal role being to provide food for the husband, the children and take care of the home."

Thanks Aaron for sending us your transcript!

Thank you for your presence and participation

AFTER FIVE MONTHS of sitting around a big table together on-line, the electronic discussion group involving 35 Farm Radio Network partners from 10 African countries, is complete. Thank you to everyone who was a part of this historic discussion. I know that at times it was difficult to make the time and effort to participate. I personally learned so much from all the participants about their work and the challenges of working with resource constraints. There is so much knowledge in the network about how to use radio to strengthen sustainable approaches to poverty reduction and specifically, natural resource management and agriculture.

I especially want to thank the resource people from Africa who helped and the partners who shared so much with each other. I realize that many partners could not participate due to a lack of connectivity, consistent electricity or access to computers. I believe that things are gradually changing and within a few short years more partners will be able to use the web to share experiences and gain access to new contacts and resources.

Based on comments from partners, I feel that the first DCFRN electronic discussion has contributed a sense of connection and ownership in the English speaking Farm Radio Network "family". We will soon be organizing the same kind of discussion for the French-speaking partners. DCFRN is at the beginning of a journey to assist in building a vital interactive network in Africa that combines rural radio and ICT's in an innovative way.

The broadcaster discussion, "*Broadcasters Making Connections for Poverty Reduction and Sustainable Agriculture*", is fully documented on the website at www.farmradio.org. You will find resources there that can help you with your radio programming, including a step-by-step guide to seeking funds.

Thanks again to everyone. I look forward to staying connected and working with all of you over the coming years.

Heidi Schaeffer
Discussion Group Moderator



WEBSITE HAS BRAND NEW LOOK

Using Website to Learn More About Network Partners

At the end of April the Farm Radio Network site www.farmradio.org got a face-lift. In response to requests from several partners we intend to continue the improvements by adding information about partner stations and the work they do. Partners will be listed by country. You will simply click on the station's name and read more about the work of each partner and radio station.

To make this happen we are asking you to send us one or two images that relate to your work (for example, a photo of your radio station, a photo of community members/farmers being interviewed for a program, etc.). Please include a short summary of the work that you do so Network partners can learn about you in your own words.

In addition, please indicate whether we can make your e-mail address public on our site so network partners can get in touch with one another. (We will only publish your email address if you give us permission to do so.)

Partners and E-mail

Dear Partners: We like to keep our database updated. If you now have an e-mail address and would like to receive information in addition to the radio script packages, please send an e-mail to Blythe McKay at bmckay@farmradio.org with your e-mail address.



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Supporting broadcasters in developing countries to strengthen small-scale farming and rural communities.

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