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## About SciDev.Net

Since its launch in 2001, the Science and Development Network has established itself as the world's leading electronic source of news, views and analysis about science, technology and the developing world.



In February 2004, Kofi Annan (above), the secretary-general of the United Nations, described SciDev.Net as an "encouraging" example of ways to help developing countries build up capacity in science and technology.

*'Science for all nations', Science, 13 February 2004*

## Can science heal the scars of war?

**SciDev.Net reports on NEPAD's latest efforts to boost science in central Africa and describes how priorities there fit into plans for science across the continent**

BY CHRISTINA SCOTT

**War-torn central Africa** is used to people moving across its borders. Mercenaries, UN peacekeepers, soldiers, refugees and aid groups are among the human traffic crossing the region. But this vast territory will soon have a new type of visitor, as a coordinator from the science initiative launched by the New Partnership for Africa's Development (NEPAD) is shortly expected to take up their post.

NEPAD's broad aims are to build the social and economic development of the whole continent through collaboration on key areas of common interest, among which science and technology figure prominently. Representatives from a group of

countries – most significantly South Africa, Nigeria, Egypt and Senegal – are at the heart of pushing plans forward.

The central Africa bloc (made up of Gabon, Congo, the Democratic Republic of Congo, Burundi and Rwanda) presents a specific set of challenges. One of the key tasks will be to revive science and technology after the chaos of the war years.

"The emphasis in central Africa is on assisting science – and scientists – to recover from conflict. We want to focus on designing programmes that will reconstruct the science and technology infrastructure," says John Mugabe, the Pretoria-based Kenyan who is executive secretary of the NEPAD science and technology forum.

The region is still recovering from four bouts of violence: the 1994 Rwandan genocide, the civil war in the Democratic Republic of Congo (DRC), an attempted coup in Congo, and ongoing rebel fighting in Burundi. It's a fragile area, and vast too, stretching from the Atlantic coast hundreds of kilometres inland to landlocked, mountainous Rwanda and Burundi. The DRC alone covers an area of 342,000 square kilometres.

Science coordinators have already been selected for the north (Bassem El Emstawi, vice-president of the National Research Council of Egypt), south (Aggrey Ambali from Malawi) and east (Mengistu Tsegaye of the Ethiopian Science and Technology Council).



**John Mugabe, executive secretary of the NEPAD science and technology forum**

## What SciDev.Net offers

- A **free-access website** providing news, views and background information
- A **sub-Saharan gateway** with regional news and analysis, provided by correspondents, researchers and policy advisors across Africa
- **Capacity-building workshops** on science communication issues
- **Sign up for our email alerts!** See back page

**Enter our science photography competition!**  
Details on the back page



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# Getting radio active

**Radio is by far the most wide-reaching and accessible form of electronic communication across Africa. SciDev.Net tunes into broadcasting and science**

**In terms of outreach**, as a vehicle for mass communication, radio leads the way. While in many parts of Africa Internet connectivity and PC usage remain low, one in four people have a radio. Radio transmitters reach over 60 per cent of the African population, and radio is treated as an invaluable community resource, with much sharing and group listening.

With this in mind, in March this year, SciDev.Net invited a number of leading development agencies and broadcasting organisations to join them in a discussion to look at ways of getting more science and technology content used in radio broadcasting across Africa. As one attendee, WrenMedia's Michael Pickstock put it: "Communication is an essential element of development. There is no more powerful means of communication than the spoken word. Radio is one-to-one communication direct into the mind of the listener."

Participants were interested to find out how 'story-led' content with a science theme could be used in their programmes. Health education campaigns have been particularly effective when radio has delivered the message, as demonstrated by the popular recent phenomenon of health 'soap operas'. Dramatisation is a potent way of making sensitive issues more palatable and understandable.

But as Francesca Silvani of Interworld Radio explained, another format for development-themed broadcasting is also on the rise, with chat shows and phone-ins proving to be one of the most popular forms of listening. This informal

platform for discussion, allowing dialogue between the broadcaster and listener, mirrors the rise of 'participation' within international development in general. Radio, it is felt, is no longer on a mission to explain, but to provide a forum for debate.

Above all, development-based broadcasting needs to link with communities, so local context and topicality is key. As SciDev.Net extends its regional network across Africa it will seek ways of encouraging the use of its materials by local broadcasters. To help facilitate growth in this area, we plan to put together a new resource: radio 'production notes', online tip sheets that will provide practical advice and resources for radio journalists and producers. These will be posted on the website as part of our guide to science communication ([www.scidev.net/scicomm](http://www.scidev.net/scicomm)). In addition we will be working with organisations with an interest in radio and development to collaborate on training workshops (for both print-based and radio journalists). We also hope to share content regularly across partner sites.

SciDev.Net aims to develop its radio plans during the year and is interested in linking with new broadcasting partners in Africa to help increase awareness of science and technology issues. We will update readers on our progress in the next issue of this newsletter.

In the meantime, if you are interested in using radio to share information about science and technology please get in touch with us at [africa@scidev.net](mailto:africa@scidev.net).



SciDev.Net would very much like to hear of radio-based science initiatives, especially those that link closely with local communities. Please get in touch with us at [africa@scidev.net](mailto:africa@scidev.net).

## Can science heal the scars of war? *Continued from page 1*

Appointments for the west and central areas are expected to be made by mid-April.

"We need to know exactly what the regional capacity is and what needs exist. The coordinator will therefore design a questionnaire, collect material from institutions and host a series of workshops," Mugabe explains. He emphasises that collecting this information is not just an intellectual exercise, but will be used to identify regional science projects to be launched in December this year.

Central African priorities are likely to include the rebuilding of infrastructure ruined by soldiers occupying laboratories and offices, who have even been seen joyriding in vehicles belonging to science institutes. Another task is to upgrade Internet, computer and telephone equipment. With poor landlines, many scientists rely on mobile phones, while downloading information from the Internet – if it's available at all – can take hours.

Mugabe feels there are significant differences between the needs of central Africa and the other regions. "While for example, agriculture is common to most countries' scientific needs, the nature of the scientific investment is going to vary across Africa. Infrastructure exists in a country like Kenya; it does not exist, or only to a limited degree, in a country like DRC. Central Africa has a greater need for capacity building and skills mobilisation. Getting

scientists to return to the region is going to be a big issue."

One topic to have triggered considerable, though so far informal, discussion is the lack of transboundary legislation to deal with the transport and use of genetically modified organisms. NEPAD is taking a lead on such transboundary issues both in terms of fostering cooperation and assisting in bilateral negotiations, as well as focusing on the specific goal of harmonising biotechnology and biosafety laws. A strategy on transboundary issues is evolving which will suggest specific ways of aligning legislation, with the long-term aim of creating a common Africa-wide biotechnology platform.

Funding for the science coordinator posts is being split between Canada's International Development Research Centre and the governments within each region. Each bloc is being asked to raise the equivalent of US \$300,000 to cover the costs of the initial needs assessments.

Meanwhile NEPAD's steering committee is due to meet within the next few months to review the assessments of regional capacities and needs being carried out by its five regional coordinators. The result will be presented to the High Level Council of Ministers and Senior Officials of Science and Technology, which was set up last year.

For further information about NEPAD: [www.nepadst.org](http://www.nepadst.org)

**"Central Africa has a greater need for capacity building and skills mobilisation. Getting scientists to return to the region is going to be a big issue."**

# Making the most of access to journals

SciDev.Net's new 'quick guide' to science publishing helps make sense of a complicated wealth of materials

Many African organisations are not taking full advantage of programmes that provide free or subsidised access to scientific literature, according to recent research. A survey carried out by the UK-based International Network for the Availability of Scientific Publications (INASP) suggests that take-up of initiatives to increase access to journals is relatively low – and that several factors are to blame. One problem is that some schemes overlap with others or are not communicated well, while other schemes have not fully taken local needs into account.

Such programmes are a response to the growing awareness that high subscription rates for scientific journals are preventing scientists and health workers in poor countries from accessing vital information. The Health InterNetwork Access to Research Initiative (HINARI), run by the World Health Organisation, for example, provides institutions in many African countries with free or reduced-price online access to more than 2,000 biomedical journals.

The AGORA programme for agriculture-related journals, run by the Food and Agriculture Organisation, works along the same lines. Another initiative, the e-Journals Delivery Service, distributes scientific articles via email to scientists who lack the bandwidth to quickly download material from the Internet.

In March, African Journals Online (AJOL) – a distribution service run by INASP that aims to raise the profile and accessibility of African research – relaunched its website. It now gives free access to more than 175 African journals in the fields of arts, science and social sciences, and offers document delivery, an improved search and browsing facility and a new email alert function. Research suggests that participating journals have benefited from the international visibility AJOL provides, and users from being able to access more African research.

While these initiatives aim specifically to increase access to scientific research findings in the world's poorest countries, there is a parallel global movement to overturn the established model of scientific publishing and make research findings freely available online in all parts of the world. This 'open-access' publishing model works by charging scientists to publish their research. It has many attractions to scientists and health workers the world over, by ensuring free access to scientific information.

But there is a snag. With the onus on authors to pay for publication, scientists in developing countries, whose grants may already be stretched, may find it even more difficult than before to get published. The two leading open-access publishers – the US-based Public Library of Sciences (PLOS) and the UK-based BioMed Central – however, waive publication fees for researchers from developing countries who cannot pay. They argue that their open-access model will benefit scientists and the wider community in developed and developing countries alike.

It's a rapidly evolving market and so it is not surprising that there has been confusion over what is available and on what terms. Find out more by visiting SciDev.Net's quick guide on science publishing at [www.scidev.net/scipub](http://www.scidev.net/scipub).

**“It's a rapidly evolving market and so it is not surprising that there has been some confusion over what is available”**

## To find out more

African Journals Online [www.ajol.info](http://www.ajol.info)

The International Network for Scientific Publications (INASP) [www.inasp.info](http://www.inasp.info)

The Public Library of Sciences (PLOS) [www.plos.org](http://www.plos.org)

BioMed Central [www.biomedcentral.com](http://www.biomedcentral.com)

Health InterNetwork Access Initiative (HINARI) [www.healthinternetwork.org](http://www.healthinternetwork.org)

Access to Global Online Research into Agriculture (AGORA) [www.aginternetwork.org](http://www.aginternetwork.org)

e-Journals Delivery Service (eJDS) [www.ejds.org](http://www.ejds.org)

## Upcoming science events

### Science journalism in the Middle East and North Africa

Cairo, Egypt | 26-27 April 2004

**Organiser** International Development Research Centre (Cairo office)

**Details** This workshop will focus on the needs of science journalists working in the region in order for them to better serve development aims.

**Contact** [yelgamma@idrc.org.eg](mailto:yelgamma@idrc.org.eg)

### Is DDT the only viable solution to malaria in Africa?

Kampala, Uganda | 26-27 April 2004

**Organiser** African Network for Chemical Analysis of Pesticides (ANCAP)

**Details** This symposium will focus on the use, management and impact of hazardous chemicals with particular emphasis on DDT.

**Contact** [kiremire@chemistry.mak.ac.ug](mailto:kiremire@chemistry.mak.ac.ug)

### Research as an agent for transformation and development

Cape Town, South Africa | 5-7 May 2004

**Organisers** Association of Commonwealth Universities and South African Research and Innovation Management Association

**Details** The conference will combine practical learning in key areas of research and innovation management with a high-level strategic review of the role of research in development.

**Contact** [coleen@confinitive.com](mailto:coleen@confinitive.com)

### Pathways to equity in health

Durban, South Africa | 10-12 June 2004

**Organiser** International Society for Equity in Health

**Details** This cross-disciplinary forum will enable those with an interest in equity in health and health services to share their expertise.

**Contact** [leslie.nunez@utoronto.ca](mailto:leslie.nunez@utoronto.ca)

### Malaria research: East African regional workshop

Morogoro, Tanzania | 13-26 June 2004

**Organiser** International Malaria Research Training Program at Muheza Designated District Hospital and Seattle Biomedical Research Institute

**Details** Annual training workshop for young scientists in East Africa who are interested in malaria and other protozoan pathogens. Designed to teach laboratory, research and grant-writing skills.

**Contact** [tkmuta@ud.co.tz](mailto:tkmuta@ud.co.tz)

### Traditional healing and HIV/AIDS

Dakar, Senegal | 9-21 July 2004

**Organiser** Africa First, Government of Senegal, ENDA Tiers Monde

**Details** An event to foster dialogue and education between practitioners of conventional and traditional knowledge, and to promote a better understanding of traditional healing practices and stimulate alliances and networks.

**Contact** [info@africa-first.com](mailto:info@africa-first.com)

## Networking opportunities

### Southern African Science Communication Network (SASCON)

A regional science communicator's network for southern Africa, hosted by the South African Agency for Science and Technology Advancement (SAASTA), which also has useful resources for science communicators. SASCON runs an electronic discussion group and hopes to offer online worksheets to help scientists become media savvy. Membership is free.

**Headquarters** Pretoria, South Africa

**Contact** [Marina Joubert, marina@saasta.ac.za](mailto:marina@saasta.ac.za)

### Public Understanding of Biotechnology (PUB)

An initiative of the South African Agency for Science and Technology Advancement (SAASTA), intended to foster a better understanding of biotechnology by the South African public. Activities are numerous, ranging from training courses and networking to competitions. The site also hosts a news page logging global online biotechnology news and a long list of resources including a biotechnology glossary.

**Headquarters** Pretoria, South Africa

**Contact** PUB programme coordinator, [info@pub.ac.za](mailto:info@pub.ac.za)



## New from SciDev.Net

### 'E-guide' to science communication

The effective communication of information about science and technology is an essential component of social and economic development. In February 2004, SciDev.Net launched an invaluable online 'one-stop shop' for journalists, scientists, students, information officers, aid workers and policy advisors. With tips and advice on a range of science communication issues, it aims to foster partnerships, networks and communities. Please visit the site, and let us have your comments and suggestions.

[www.scidev.net/scicomm](http://www.scidev.net/scicomm)

### 'Quick guide' to scientific publishing

By dramatically reducing the cost of disseminating information, the Internet is revolutionising science publishing. But calls to make scientific information freely available to all are proving controversial. Find out more about the issues, and find details of free access initiatives, in this new SciDev.Net quick guide. And, as ever, we welcome your comments and additions.

[www.scidev.net/scipub](http://www.scidev.net/scipub)

### Dossier on biodiversity

How can concerns over biodiversity be reconciled with development needs? Visit SciDev.Net's online guide to find all the scientific information you need. SciDev.Net dossiers are comprehensive guides to topical issues that sit at the point where science and policy meet. Guided by an expert panel of advisors, and updated at regular intervals, dossiers are a crucial resource for anyone interested in science, technology and development.

[www.scidev.net/biodiversity](http://www.scidev.net/biodiversity)

### Get involved!

#### Join the Science and Development Network

#### Free weekly email alert

If you register at [www.scidev.net/register](http://www.scidev.net/register) you will receive:

- A weekly email alert with news, views and summaries of the latest content
- Updates on new e-guides, dossiers, quick guides and other SciDev.Net activities

## Future SciDev.Net events

### Science communication

SciDev.Net is provisionally planning to hold a meeting and workshop in Nairobi, Kenya in November this year. It will focus on the practical application of science communication, with presentations from experts in the field, as well as opportunities to share ideas and experiences in smaller groups. If you would like to participate or receive further information, please contact [africa@scidev.net](mailto:africa@scidev.net).



### HIV/AIDS reporting workshop

Based on the success of several previous SciDev.Net workshops, further meetings on the use of information and communication technologies for reporting on HIV/AIDS science are planned. The first of these will be a workshop in Dakar, Senegal this autumn. If you are involved in science communication and would like to take part, please contact [africa@scidev.net](mailto:africa@scidev.net).



### SciDev.Net internships in London

This summer SciDev.Net will welcome the arrival of Gloria Katusiime, a science journalist from Uganda, who will join the London office for a month's work experience and training. Gloria was one

of the participants at our workshop on science communication in Kampala, Uganda last year. We are keen to extend these internships wherever the opportunity arises. If, like Gloria, you have had some experience in science journalism and are keen to develop your professional skills, please send your CV, cuttings and a cover letter to [africa@scidev.net](mailto:africa@scidev.net). We hope to be able to offer several such places each year.

### SciDev.Net's newsfeed

If you run a website, why not get our **FREE newsfeed**. It automatically adds daily science news directly onto your site (see, for example, [www.sahealthinfo.org](http://www.sahealthinfo.org)). It's simple to set up and is tailored to suit your site. Please contact [support@scidev.net](mailto:support@scidev.net).



### PHOTOGRAPHY COMPETITION



## Win a Freeplay wind-up radio!

We are always on the lookout for science-related images to use on our website and within our publications. **Do you have an image that might be suitable?** We are holding a competition to seek out the best photographs taken by members of the SciDev.Net network. The images can be emailed or posted to us and can depict anything from climate to health, from rural scenes to high-technology. The closing date is 31 July and **the winner will receive a Freeplay wind-up radio**. So get snapping!

Please send your entries with full contact details to [africa@scidev.net](mailto:africa@scidev.net) (digital images) or send your print copies to SciDev.Net, 11 Rathbone Place, London W1T 1HR. Sorry, but we will be unable to return original photographs, so if sending your entry by post please keep a copy. In addition to the top prize, **a selection of the best photographs will be published on the website and (space permitting) in the next issue of this newsletter**. We look forward to seeing your entries – good luck!

### Write for us

To submit material for inclusion in the next issue of the newsletter – to be published in September – please send a brief description of the topic you would like to write about to [africa@scidev.net](mailto:africa@scidev.net).

### More copies?

To request further copies of this newsletter please provide your postal address and state the number of copies required.