

SciDevNet 20

YEARS

Bringing science & development together through news & analysis

ANNIVERSARY MAGAZINE Special Edition

Two decades as the world's leading source of news about science and technology for global development.



**Sci
Dev
Net**

Supported content

SciDev.Net offers third party organisations the chance to support our content and raise awareness of common topics of interest among SciDev.Net's large audience of policymakers, science communicators, researchers, media professionals, and development stakeholders. Our supported content offerings include:

Spotlights

SciDev.Net's supported Spotlights enable complex subjects to be tackled over a series of six to eight articles around an issue that matters to you. Recent topics have included antibiotic resistance and migration.

Features

Our journalists aim to get the story behind the research, creating a compelling multimedia narrative that engages audiences and syndication partners.

Interactive Data Visualization

Data visualizations can bring data alive, each data visualization is unique and highly optimized to help the data tell the story.

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We can hold debates around specific topics, bringing in senior policymakers and academics to put forward their views. Debates are usually combined with Q&A interviews and a final analysis feature bringing together some of the issues raised.

SciDev.Net content is seen and heard almost 450 million times annually. We have contributors in approximately 80 countries around the world and our news is published in French, Spanish and Arabic as well as English.

To learn more email 'Supported content' to partnerships@scidev.net

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Information for Freelance News Writers for *SciDev.Net*

If you wish to 'pitch' a story to us, send a brief summary (2–3 paragraphs) explaining the story as concisely — but as concretely — as possible. We strongly encourage you to do this before writing the news item in full. Please use the *SciDev.Net* pitching template if supplied with one by your regional editor.

Your story idea should be submitted by email to the relevant regional coordinator, with a copy of the email sent to the news editor (news@scidev.net):

- > Latin America and the Caribbean — Luisa Massarani (luisa.massarani@scidev.net)
 - > Sub-Saharan Africa — Ochieng Ogodo (ochieng.ogodo@scidev.net)
 - > Sub-Saharan Africa (Francophone) – Julien Chongwang (julien.chongwang@scidev.net)
 - > Middle East and North Africa — (bothina.osama@scidev.net)
 - > Asia and Pacific – Joel Adriano (joel.adriano@scidev.net)
- For more information on writing for *SciDev.Net*, please click here.

Partnerships with *SciDev.Net*

SciDev.Net is committed to providing a platform within which the science community, global development professionals and policy stakeholders can explore science and technology. We realise that effective delivery of our goals depends on initiating and developing partnerships with a range of organisations at global, regional and national levels to achieve shared objectives.

Partnerships can involve syndication of *SciDev.Net* material, development of content, joint projects such as science communication workshops and events, and awareness-raising ventures.

Please contact us at marketing@scidev.net if you have ideas for partnerships or projects with *SciDev.Net*.

Content and syndication partnerships

We are keen to develop a range of partnerships with media outlets and information networks, particularly in the global South, which support syndication of our content. These partnerships will allow us to penetrate the 'media diet' of decision-makers more effectively and will give our partners access to 'added value' content supporting adaptation that is locally relevant. See here for more information.

Media partnerships

SciDev.Net will sometimes develop media partnerships for key global and regional events, through which we support efforts to increase the profile of outputs and proceedings among the audiences that matter most.

These partnerships do not imply any privileged access to our news coverage or override our editorial independence. Please contact marketing@scidev.net for more information.

Training partnerships

We aim to build the capacity of researchers and science communicators to present accurate and accessible information about science and technology, bridging the gap between research, policy and practice. Please contact training@scidev.net for more information.

We develop partnerships with regional training institutions, including universities and research organisations. Partners in our training programme receive training for their facilitators, curricula and materials for adaptation, and a regular audit of training programmes so they can offer clients a service approved by one of the world's leading suppliers of science news.

Work at *SciDev.Net*

We advertise all *SciDev.Net* vacancies in our jobs pages or through our weekly email alert. To sign-up visit www.scidev.net.



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Science journalism matters now more than ever

By Ben Deighton

The world has changed in the past 20 years, and not in ways that many had expected.

When our founder David Dickson launched *SciDev.Net* back in 2001 as a web-only news service, it was seen as a radical thing to do. Yet, many national newspapers are now abandoning their printing presses.

For our part, we have moved from being a single website to a multi-format, multi-platform publication where most of our readers come from syndication partners, social media and web aggregators, and where most of our visitors use a smartphone screen often no bigger than the palm of your hand.

When we started out, our homepage led with stories such as: *Nigerians can't afford ozone-protecting fridges* (April 2002); *India approves cultivation of GM crops* (April 2002) and *Argentina's crash brings ill wind for science* (April 2002).

While these issues have moved on, the vast majority of our stories from the early days wouldn't look out of place on our homepage today – *Modified mosquito is malaria proof* (May 2002), *Global environmental change and health* (October 2003), and *Rich nations 'must boost science in poor nations'* (September 2002).

The names have changed, but the issues often remain the same. US equivocation on climate change – *Bush, climate change and false accounting* (July 2002) – is still top of the agenda. Fake news – called pseudoscience back then – was already a big deal, prompting stories such as *Litmus test proposed for 'pseudo-science'* (May 2002).

Over the past two decades, some things have improved. The number of people facing hunger has fallen by two-thirds, according to estimates from the UN's Food and Agriculture Organization, although progress has reversed in the past year due to the pandemic. Malaria deaths have also fallen by two-thirds, WHO data shows.

Yet, in the same period, UNAIDS data shows the number of people living with HIV has increased by a third, and for climate change, the predictions of wildfires, floods and droughts are now coming to pass — extreme weather events and disasters increased

five-fold over the past 50 years, according to the UN's World Meteorological Organization.

COVID-19

And over the past 18 months, the COVID-19 pandemic has exposed huge inequalities between rich and poor countries, with double vaccination rates often more than 20 times higher for wealthy nations. At the time of writing, only a handful of countries in Sub-Saharan Africa had double vaccinated more than three per cent of their populations, while the rates were well over 60 per cent for many European countries.

It means health workers in the world's poorest communities remain at risk due to a lack of vaccines, while rich countries have started rolling out booster shots.

All this shows that science plays an increasingly central role across the world, whether it is to contain infectious disease outbreaks, adjust to a changing climate, or turn back the clock on biodiversity loss.

Reflecting that, our readership has exploded. At the end of 2003, *SciDev.Net* had just over 8,000 registered users. Now, more than ten times that number subscribe to our mailing lists.

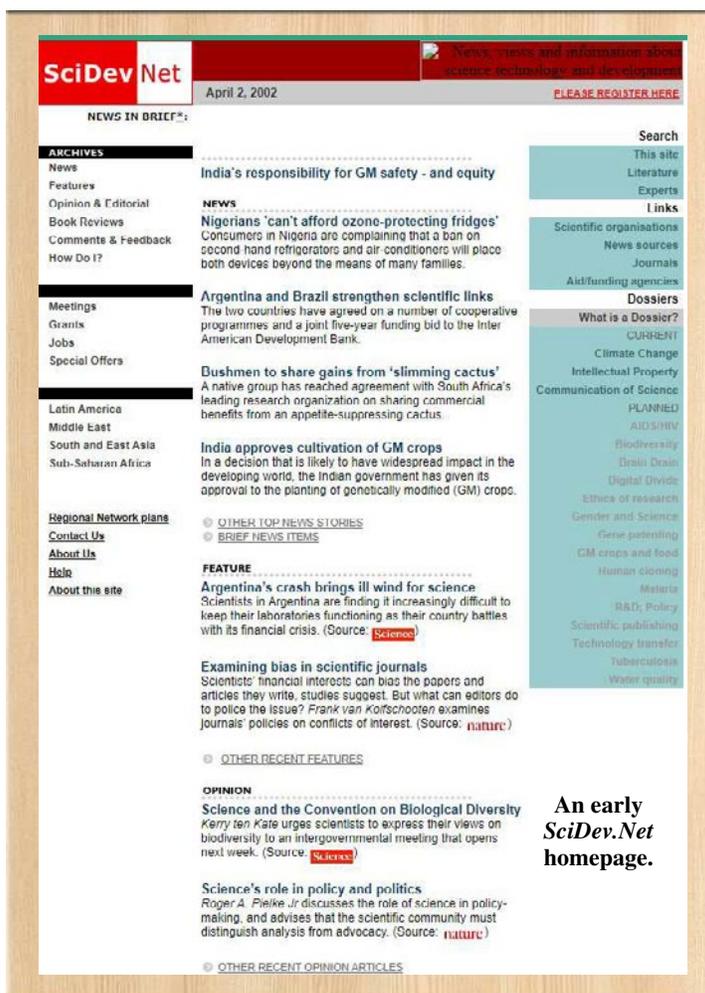
In 2020, our content was seen or heard around 450 million times across multiple channels, including radio via our syndicated podcasts, national newspapers that picked up and republished our articles, and web aggregators such as Google News.

The fact that two-thirds of our reach comes from other outlets publishing our stories demonstrates the growing importance of science news in these troubled times. The success of *SciDev.Net's* training courses also backs that up as more and more journalists turn to us for help in developing expertise in science reporting.

Yet, more often than not, funding has not followed this trend. Fewer and fewer philanthropic foundations and donors are willing to support both journalism and the broader group of organisations that put science into the hands of the public

and in front of policymakers, where it can have the greatest impact.

Funding for these organisations serves as critical "glue money", to quote Peter Gluckman, the new president of the International Science Council, when he gave *SciDev.Net* an interview recently. And our global drive to make the world a better place risks coming unstuck as this glue money dries up because good science journalism matters more now than ever.

The screenshot shows the SciDev.Net website interface from April 2, 2002. The header includes the SciDev.Net logo, the date, and a navigation bar with links for 'Home', 'News', 'Features', 'Opinion & Editorial', 'Book Reviews', 'Comments & Feedback', and 'How Do I?'. The main content area is titled 'NEWS IN BRIEF' and lists several articles, including 'India's responsibility for GM safety - and equity', 'Nigerians can't afford ozone-protecting fridges', 'Argentina and Brazil strengthen scientific links', 'Dushmen to share gains from 'slimming cactus'', and 'India approves cultivation of GM crops'. A sidebar on the right contains a search bar, a 'PLEASE REGISTER HERE' button, and a list of categories such as 'Scientific organisations', 'News sources', 'Journals', 'Aid/funding agencies', 'Dossiers', 'What is a Dossier?', 'CURRENT', 'Climate Change', 'Intellectual Property', 'Communication of Science', 'PLANNED', 'AIDSMV', 'Biodiversity', 'Brain Drain', 'Digital Divide', 'Ethics of research', 'Gender and Science', 'Gene patenting', 'GM crops and food', 'Human cloning', 'Malaria', 'R&D, Policy', 'Scientific publishing', 'Technology transfer', 'Tuberculosis', and 'Water quality'. A footer section titled 'OTHER TOP NEWS STORIES' and 'OTHER RECENT FEATURES' is also visible.

An early
SciDev.Net
homepage.

What others say.

Comments from those who helped write our story.

Science journalism has a critical role to play both for democracy and development. Not only does it convey important research results, it also explains the role of research in society and contributes to critical thinking and evidence-informed decisions at all levels. *SciDev.Net* was created by highly qualified science journalists who identified a blank spot: there was practically no science journalism in many low- and middle-income countries. For people who would benefit the most from the fruits of research, there was scarcely any reporting to take part in. *SciDev.Net* set out to change that. What started as a project grew into a new science news outlet for low- and middle-income countries, dedicated to putting science at the heart of development. The Swedish International Development Cooperation Agency (SIDA) supported this endeavour from the very beginning, within the frames of its research cooperation. SIDA has for several years now been *SciDev.Net*'s major donor.

SciDev.Net does not only produce science news of high quality of relevance for inhabitants, practitioners and decision-makers in low- and middle-income countries, it also actively reaches out to local media to encourage syndication of its publications to reach local populations. It also fosters generations of science journalists in low- and middle-income countries by employing editors and freelance reporters, offering a source of income, a working environment and training of professional skills. Much of its educational material is freely available online, with pedagogic guidelines and self-paced courses. Targeting also researchers and science communicators with its training, *SciDev.Net* helps build the ecosystem of people needed to enable scientific outreach.

In the past years *SciDev.Net* has strengthened its editorial teams across the global South and developed its unique position, making more and more out of it journalistically, through the on-the-ground perspective of its reporters and global cooperation between its editors. All with the overarching goal of improving people's lives, by putting science at the heart of development. The great need for qualitative, credible science journalism in general became increasingly clear during the COVID-19 pandemic and the concurrent "infodemic", and *SciDev.Net* has demonstrated its strength and relevance, continually increasing its reach and readership.

Joining with CAB International in 2017, *SciDev.Net* found much needed financial stability whilst defending and cherishing its journalistic independence, both crucial prerequisites for fulfilling its mission.

Happy birthday, *SciDev.Net*! It has been a great joy to follow and contribute to your journey towards what *SciDev.Net* is today. May you live and thrive, maintain your ability to adapt to changing circumstances and demands, and continue to contribute to strong science journalism in low- and middle-income countries across the globe.



Michaela Lundell
Science Communicator/Research
Advisor, Unit for Research
Cooperation SIDA



There always has been a gap, and there still is a gap, between what science does and what people hear, and there does need to be a means of conveying good objective messages. I think we have seen that very much in recent years around COVID-19. There is still a challenge — and it will continue — of how you explain complex things in a form which is neither patronising nor trivialising.

If good science communication is needed in Britain, it is needed even more overseas, particularly in countries which are advancing quite rapidly technologically. A misrepresentation of facts, or shall we say opinion overtaking facts, becomes a powerful, negative tool. For an organisation like *SciDev.Net*, how we handle the problem of influencing the Twittersphere and Facebook — which have become more of the common person's access to information than sitting down and reading an article in the newspaper — is the real challenge.

Andrew Bennet
SciDev.Net Chairman 2007-2014

David Dickson worked for me as the news editor of *Nature* and he was always someone with an amazing knowledge of the international development landscape, very critically minded as a journalist. So, in that sense, he was exactly the right person to set up something like *SciDev.Net*.

The way that the universities in some low- and middle-income countries are engaging both with governments in relation to national targets for SDGs, and with their local communities in relation to societal challenges, is really quite interesting. That is something I think would be great for us publishers to cover more of, and maybe for *SciDev.Net* to highlight. You need to be distinctive and unique, and that is challenging for all of us in media. But in terms of the editorial judgement of what is impactful, I would hope that *SciDev.Net*, given that it has got 'dev' in the title, could be very strong at.

Philip Campbell
Editor-in-Chief
Springer Nature



SciDev.Net, from its conception, understood that science communication was not just about scientific content it also mattered who did the communicating. Twenty years ago, this was not part of mainstream thinking. Now in the age of 'alternative facts', 'adversarial influencers' and global targets for sustainability, science journalism needs this kind of reflexive thinking desperately. For instance, it is clear that science journalism has to be nuanced with local inflections to achieve impact, or 'cut through', as they say.

I am proud of the investment we made in the regional desks during my time at *SciDev.Net*. We saw significant growth in our readership as a result. To be clear though, even this structural development depended on the support of staff, correspondents, board members, funders and, of course, our loyal readers.

In the future, I hope that the platform will continue to see itself as part of a movement. This means among other things supporting the capacity of a new cadre of science journalists. Their careers might not look like the careers of science journalists 20 years ago but their role is no less important.



Nick Ishmael-Perkins
SciDev.Net Director 2012- 2017

Comments from those who helped write our story.

At a time when science, technology and innovation activities in different parts of the world need to be linked for many good reasons, it is good to note that there is such a medium called *SciDev.Net* which is committed to accomplish these linkages through news and analysis.

SciDev.Net's pool of consultants, advisors and freelance journalists have always made contributions in a very objective manner that somehow help in decision making so that the activities and projects that are undertaken will have positive impacts, particularly on the goals of inclusiveness, equitable distribution of the fruits of development and sustainability.

SciDev.Net's evolution during the last two decades has seen challenges, new opportunities, and a better reach, particularly in the developing world. The numerous articles that come out of it reach an impressive audience of more than 30 million. This is indeed a very wide reach that cuts across borders and benefits a wide spectrum of socio-political types of audiences.

SciDev.Net also ensures that the discussion on issues related to science and technology for development are discussed from the perspectives of developing countries or countries that are outside traditionally-developed ones. Their use of independent journalism to help individuals and organisations apply science to decision making makes it truly a service for the people.

Congratulations to *SciDev.Net* for the 20 years of providing authoritative reports focusing on the interface between science, technology and development in the developing world.



Hon. Fortunato dela Pena
Secretary, Department of Science and Technology, Philippines

S*ciDev.Net* existed for several years in David Dickson's mind. As a science journalist, David concluded that the growing number of scientists from Africa, Asia and South America deserved more visibility.

A turning point was the 1979 UN Conference on Science and Technology for Development: David edited the conference newsletter. By then, he had *Nature* and *Science* publishing more articles about science outside the countries accounting for most of their content and revenue.

But he concluded that the best approach would be a news service dedicated to the developing world. These donors, he discovered in Vienna, would also fund *SciDev.Net*.

I participated in the International Development Research Centre's decision to back *SciDev.Net*. Later, at the World Federation of Science Journalists, we often collaborated. May both organisations continue to work together for the progress of science journalism.

Jean-Marc Fleury
Professeur associé, Département d'information et de communication, Université Laval
Conseiller principal Fédération mondiale des journalistes scientifiques



S*ciDev.Net* was a pioneer in providing accessible access to top quality research, science and development insights for researchers and policymakers written and edited by journalists from lower- and middle-income countries.

Against a backdrop of rising fake news and misinformation, the economic weakening of media and the surge in focus on health and the environment, *SciDev*'s role has never been more important.

I am proud to have been involved in supporting the organisation when it operated standalone, and helping secure its future as an editorially independent arm of CABI, which is closely aligned with its values, operations and footprint.

Andrew Jack
Chairman, SciDev.Net's Editorial Advisory Group



When in the aftermath of the 1999 World Conference on Science both David Dickson and Geoff Oldham invited me to join a new initiative, *SciDev.Net*, aimed to introduce a more direct channel of science news from the developing world, I was thrilled. For eight years it was a constant learning process that forced us to think of new ways, new instruments, new forms of interaction, trying to strike an always renovated balance between control and autonomy of the ways of different journalists, working from regions and locations, exerting their judgment and freedom. David was a very experienced journalist who was worried about

keeping control of the quality of the platform from his minuscule team in London, in an immense world in which different languages, education and political traditions co-existed.

But professionalism, respect and goodwill prevailed and *SciDev.Net* grew in scope and reach. I am happy to celebrate its 20 years of age!

Hebe Vessuri
SciDev.Net
Founding Executive Board member and Collaborating researcher at Centro de Investigaciones Ambientales, Universidad Nacional Autónoma de México



S*ciDev.Net* was an audacious experiment at the time it was launched in 2001 – when the web's reach was still very limited in the global South, Google just three, and social media yet to emerge.

Founder director and science journalist David Dickson wanted to create a truly global, free-access website as “a forum for joint reflection on the many complexities of the relationship between science, technology and society”. He persuaded TWAS, *Nature* and *Science* to be founding partners and involved noted science policy scholar Geoff Oldham as founder Board chair. He also reached out to dozens of science journalists across Asia, Africa and Latin America.

I was among those early collaborators — and what an enriching journey it has been! I have engaged *SciDev.Net* as an avid user, contributor, columnist, event speaker and Board member. I salute all who have shared our journey, and hope for plenty more thoughtful conversations for years to come.

Nalaka Gunawardene
Science writer and media analyst, Sri Lanka
SciDev.Net global trustee, 2006 – 2015





Ruth Douglas

SciDev.Net's commitment to communicating validated science objectively to policymakers and the wider public makes it a perfect fit for the Centre for Agriculture and Bioscience International (CABI), its parent organisation, says chief executive Daniel Elger.

Elger, who took the helm at CABI in September 2020, stresses that the platform's editorial independence is one of its greatest assets — and won't be compromised.

What is CABI and what does it set out to achieve?

CABI is an intergovernmental organisation with 50 member countries, and we are guided by the priority of those members who own the organisation.

We are all about generating, disseminating and applying scientific knowledge to solve problems in agriculture and the environment. On the development side what that means in practise is that we are seeking to address the challenges faced by smallholder farmers.

There are 500 million small farms worldwide and our efforts are directed at not only improving the productivity and efficiency of smallholder farmers, but also thinking about how they are connected into sustainable value chains to improve their livelihoods over the long term.

A large fraction of smallholder farmers are women who often have less good access to new technologies, information and resources than male farmers and that's something we also seek to address.

Where does CABI work and what are some of its key projects?

We work across the developing world with the biggest focus in Africa and Asia, but also to some degree in Latin America and the Caribbean.

One of the programmes we've been known for is Plantwise, which hinged around setting up plant clinics where farmers could come to a plant doctor with a problem they had with their crop and get evidence-based approaches to deal with that problem.

We built around that a whole infrastructure of digital information and resources which farmers and other stakeholders could tap into. Over the last ten years that has reached more than 50 million smallholder farmers.

The other large programme that CABI has run over recent years is Action on Invasives. That looks at dealing with threats from invasive species from the regional level down to the farm.

SciDev.Net's editorial independence is a great asset — CABI chief Daniel Elger

We are now putting these two programmes together into a new programme called PlantwisePlus, which builds on them with new approaches.

Where does SciDev.Net fit in within CABI as an organisation?

CABI goes from generating and disseminating scientific research, to putting it into practise, influencing policymakers, and reaching smallholder farmers on the ground so that they have

knowledge and tools at their fingertips. SciDev.Net fits naturally with that in that it's all about communicating validated scientific information in an objective way to stake-holders, the wider public, and policymakers.

We know that SciDev.Net is successful in reaching policymakers because of the impacts that have been documented for some of its investigations and stories. So that fits neatly with CABI's wider mission and other strands like our publishing and communications work.

Isn't there a danger that SciDev.Net's editorial independence is compromised?

Right from the start, steps were taken to guard against any risks of compromising SciDev.Net's editorial independence. There's a governance structure and an editorial advisory committee whose goal is to ensure that at no time is editorial independence compromised.

There's a lot of interplay [between CABI and SciDev.Net] in terms of skills and advice, but we are absolutely able within CABI, to see that it's very important not to compromise that editorial independence. We never try to influence the stories that

SciDev.Net covers, or the way in which they're covered, because we prize that objectivity and independence as well.

How do you see the future of SciDev.Net shaping up over the next 20 years?

One of the things that CABI has been able to contribute to SciDev.Net is a stable financial setting within a larger organisation and that has helped ensure that SciDev.Net can continue to invest in developing its offering. So, I expect that will continue to broaden and that SciDev.Net will continue to increase the range of formats and approaches — as with the podcasts which have been very successful.

I think that stability provides a good environment for SciDev.Net to continue to develop the other strands of its activity like training in science communication which is also an important part of its work, as well as its excellence in objective news coverage and analysis.





SciDev.Net coverage highlights water crisis in Iraq brought on by a Turkish dam

Bothina Osama

That media coverage remains a powerful tool in influencing policy decisions is amply borne out by the course that the Ilisu dam issue between Turkey and Iraq took after *SciDev.Net* picked it up.

Turkey's announcement in 2018 of plans to fill the Ilisu dam across the Tigris threatened water shortages for millions of Iraqis. With no water-sharing agreement between the two countries, Iraq's water and food security were at risk.

SciDev.Net's news stories covering the potential shortages and deterioration in water quality contributed to the postponement of the filling and operation of the dam's reservoir by Turkey.

A drastic decrease in annual flow from 21 billion cubic meters to 9.5 billion cubic meter's would have affected the quality of the river's water and increase saltwater infiltration, making it unsuitable for drinking or even irrigation, according to Ramadan Hamza Muhammad, chief expert on water strategies and policies and member of the faculty at the

University of Duhok in Iraq.

It was estimated that more than 700 thousand hectares of agricultural land would be destroyed in the governorates through which the river passes, and in Baghdad, the level of the Tigris would drop by more than half. Says Muhammad: "This water system has a direct impact on Iraq's water and food security and the lives of the Iraqi people."

During discussions held between 3—5 January 2018, the Iraqi delegation called for Turkey to postpone the operation of the dam until June 2019. However, with no written agreement regarding sharing the water, fears of a worst-case scenario ran high.

SciDev.Net published its first story on the subject on 13 January 2014, focusing on Iraq's growing concerns over the Ilisu dam. *SciDev.Net* reporter in Iraq, Adel Fakhir, reached out to experts and stakeholders to cover the story from a human-interest angle.

The issue remained unresolved and, on 17 July 2020, *SciDev.Net* published a third story on Iraqi fears of what might happen with the commissioning of the Turkish dam. The aim

was to raise awareness among policymakers of the seriousness of the water shortage in Iraq by bringing out scientific facts and possible solutions through interviews with experts and officials.

Fakhir was told by officials that strong media coverage, including that by *SciDev.Net*, was instrumental in compelling the Turkish government to address the problem and postpone the operation of the dam.

"*SciDev.Net's* coverage was balanced, neutral and scientifically accurate. It covered all aspects of the subject from both the Iraqi and Turkish perspectives. This contributed to the postponement of the filling and operation of the dam's reservoir," said Ahmed Ibrahim, Head of Water Research, National Centre for Water Resources Management.

Says Ramadan Hamza Muhammad: "*SciDev.Net's* coverage was accurate, continuous, credible, fair and impartial."

In a follow-up Q&A with *SciDev.Net*, the Iraqi Minister of Water said the Turkish government was negotiating lessening the impact of the dam going forward.

SciDev.Net story prompts antibiotic ban in Indian agriculture, protecting ‘drug of last resort’

In brief: every year, more than 58,000 infants die of neonatal sepsis in India. Antibiotics are becoming less effective against the condition because of their overuse, including in agriculture. *SciDev.Net* published a story about the importance of maintaining the antibiotic colistin as a drug of last resort against neonatal sepsis, stimulating the debate that led to the ban of colistin in agriculture.

Why it matters: high levels of antibiotic overuse have made many drugs resistant. However, a handful of drugs restricted by the World Health Organization, including colistin, form a last line of defence for infants who develop neonatal sepsis.

The big picture: according to the World Health Organization, antibiotic resistance is one of the biggest threats to global health, food security and development today. Infections are becoming harder to treat as antibiotics become less effective.

By the numbers: neonatal sepsis, a systemic infection in the first 28 days of life, is the third most common cause of death among infants less than four weeks old, accounting for 225,000 deaths globally every year.

Background

In hospitals across India, babies are dying for lack of working antibiotics. Despite cleanliness and vigilance, drug-resistant microbes infect infants causing neonatal sepsis, a condition that kills over 58,000 babies every year.

One relatively obsolete antibiotic, colistin, has been used successfully to prevent neonatal sepsis. In 2019, Dr Dinesh Raj, a paediatrician working at the Holy Family Hospital in New Delhi, explained: “Because of the resurgence of drug-resistant pathogens, it is being used as a drug of last resort.”

However, Dr Sumbul Warsi, medical director of the Holy Family Hospital believed that the “irrational and inappropriate” use of antibiotics, including misuse in agriculture, was contributing to “antibiotic resistance and rising instances of neonatal sepsis”.

Given the liberal use of colistin in poultry farming, it was unclear how long the antibiotic could remain effective. Already in 2017, the World Health Organization recommended that “farmers and the food industry stop using antibiotics routinely ... in healthy animals”, listing colistin as one of the critically important antimicrobials for human medicine.

India’s Drugs Technical Advisory Board, part of the Ministry of Health and Family Welfare, also recommended that colistin and other antimicrobials not be used in agriculture but, as of early 2019, no formal ban had been adopted.

What action did SciDev.Net take?

SciDev.Net Regional Coordinator for Asia Pacific, Joel Adriano, had been following the growing crisis in antibiotic misuse and resistance in India. In mid-2019, he heard about the specific use of colistin to reduce infant mortality.

At the time, no other news outlets had covered colistin in detail. Adriano commissioned a comprehensive story from *SciDev.Net* journalist Ranjit Devraj; the story was escalated to *SciDev.Net*’s global desk.

Devraj reached out to contacts in the Indian Agricultural Research Institute (ICAR) and the Holy Family Hospital in New Delhi. He spoke to agricultural scientists and top medical experts and paediatricians to understand the potential benefit of colistin and the dangers in continuing to use it in agriculture.

On 5 July 2019, *SciDev.Net* published an in-depth news story under the title *The awful toll of superbugs in India’s hospitals*. The article focused on interviews with paediatricians who had come face to face with colistin use in hospitals, rather than focusing on the research community, which other articles on antibiotic misuse had done up to this point.

SciDev.Net was the first and only outlet to cover the story with this angle. Major Indian news portals picked up and published *SciDev.Net*’s story; other outlets cited it.

What was the impact of SciDev.Net’s action?

On 22 July 2019, a little over two weeks after the *SciDev.Net* article was published, the Indian Ministry of Health and Family Welfare banned the use of colistin in agriculture. Specifically, it prohibited the manufacture, sale and distribution of colistin and its formulations for food-producing animals, poultry, aqua farming and animal feed supplements.

Devraj later learned from his contacts in ICAR that his article had played an important role in stimulating the debate that led to the ban, helping to raise awareness among key decision makers and policymakers about the importance of maintaining colistin as an antibiotic of last resort.

Sushil Kumar, IAS, Secretary, SC National Commission, former Secretary of ICAR and Additional Secretary, Ministry of Agriculture, said: “The *SciDev.Net* story by Ranjit Devraj positively and proactively enhanced the debate on the use of the colistin for agricultural purposes. He held discussions with top agriculture scientists of Indian Council of Agriculture Research and senior officials handling policy planning matters in the Ministry. As a result of his passionate espousal of sustainable agriculture and related nationwide debate, colistin was banned for use in agriculture. This marks another success in highlighting important issues of public policy where Mr Devraj has actively contributed.”



Students' future on hold as go

By: Neena Bhandari

A “generational catastrophe” looms as governments prioritise opening of malls over schools, resulting in huge learning losses with some 117 million children globally still affected by full school closures due to COVID-19 lockdowns, according to the UN Educational, Scientific and Cultural Organization (UNESCO).

“You can’t open shopping malls and keep the schools closed,” UNESCO’s director of division for policies and lifelong learning systems Borhene Chakroun, tells *SciDev.Net*.

“Governments have to take policy measures now to prevent a generational catastrophe in the future. They should reopen schools as soon as the sanitary situation allows and use closing them as the last resort.”

As of late September 2021, nine countries — Brunei Darussalam, Fiji, Malaysia, Myanmar, Nepal, New Zealand, Pakistan, the Philippines and Sri Lanka — in the Asia Pacific region have fully closed their schools due to COVID-19, accounting for 105 million or 10 per cent of total students. As many as 51 million are primary school students, according to UNESCO.

But with economies on the brink and with dwindling finances, many countries in the region like Malaysia, Nepal and the Philippines have reopened shopping malls, restaurants and other business establishments while still keeping schools fully closed.

Nine-year-old Altamash is yearning to return to school. “When will school reopen?” is a refrain his mother hears every morning. A student of Grade Four at Nigam Pratibha Vidhyalaya in Delhi’s eastern suburb of Mayur Vihar in India, he says: “I miss my friends, my teachers, the playground and the school lunch.”

Being cooped up in a two-room home for over 18 months has not been easy for his family of six. Juggling a single device, a mobile phone, among four brothers for attending online classes has been another challenge.

In March 2020, to prevent the spread of COVID-19, many countries began closing schools and moving to remote learning, affecting 1.6 billion learners in developing and developed countries alike.

Schools have had to switch overnight to distance home-based learning. The Asia Pacific region was largely ill-equipped for this sudden transition. Many

countries had to cope with limited infrastructure, costly internet service and devices, and teachers’ and learners’ readiness with digital skills.

Many families struggled to acquire even a single device. In India, 42 per cent of children between six and 13 years reported not using any type of remote learning device during school closures. In Pakistan, 23 per cent of younger children did not have access to any device, according to UNICEF.

“There was a myth, in the first half of 2020, that schools can be replaced by online platforms,” says Chakroun. “Schools have to evolve to cope with hybrid learning and new pedagogical modalities. Online learning modalities have been less effective for primary school children and learning losses have been huge worldwide.”

During school closures, education has been provided through a combination of online classes, printed modules and worksheets, and radio and television lessons.

For Altamash, who loves maths and science and wants to be a doctor when he grows up, it is his elder brothers in Grades Six and Nine who get priority use of the mobile phone, but they later help him with his lessons. “Reading on a small mobile telephone screen is strenuous unlike on a blackboard. Our teachers made learning fun and students helped each other,” he says.

Lost formative years

Children have missed the hands-on experience of learning and face-to-face engagement with teachers.

Since the onset of the pandemic, schools have been completely closed for an average of 16 weeks in the Asia Pacific region comprising 47 countries. If partial closures by locality or educational level are factored in, the average duration of closures represents 29 weeks across the regions, according to the latest data from UNESCO HQ’s global monitoring of school closures.

During the foundational years of primary school, representing grades one to six, schools are more than just places of learning. They play a huge role in the general cognitive and motor skills development of children.

It is a place where children learn socio-emotional skills, such as developing friendships with their peers; having access to a library, sports, art and music lessons, excursions to museums, which all add to their general knowledge and understanding of the world. For some, it is also a place where the school meal is the only nutritive meal they get in a day. This overall development and well-being contribute to their learning.

Experts say learning losses at the foundational years of primary schooling have the most long-lasting impact on all aspects of a child’s development.

“If children don’t get the foundational skills in primary school, they can’t reach their full potential in secondary school and in their future prospects. We are yet to understand the full extent of this [school closures],” says

Save the Children Australia’s team lead and senior education advisor Nora Charif Chefchaoui.

Learning poverty compounded

Even before the pandemic, about 60 per cent of children in South Asia were unable to read and understand a simple text at age ten. In addition, 12.5 million children at the primary level were out of



school, UNICEF research shows.

This existing learning crisis has been compounded by COVID-19-led school closures, widening inequities in the developing countries of the region.

Chefchaoui tells *SciDev.Net*: “The quality of education was always a concern. Many children were passing their early grades through automatic promotion. They were not able to read and write in the language of instruction, essential to succeed in secondary school and in life.”

The World Bank and UNESCO coined the concept of Learning Poverty, which means being unable to read and understand a simple text by age ten. A UNESCO study shows that over 100 million children will fall below the minimum proficiency level in reading due to the impact of COVID-19 school closures.

“In Asia, the most affected are children from the poorest socio-economic households, those in rural areas, and ethnic groups in mountainous areas because their mother tongue is not the language of instruction,” says Chefchaoui. “Also, the education system doesn’t provide necessary accommodations to children with disabilities and special needs to fulfill their potential. These existing barriers have been multiplied by the pandemic.”

Home schooling challenges

Besides, in the densely populated countries of Asia, large families sometimes reside in tiny apartments and cramped spaces. Expecting young children to stay focused and engaged in learning, with other distractions in an overcrowded home, can be



“There was a myth, in the first half of 2020, that schools can be replaced by online platforms”
Borhene Chakroun, UNESCO

Govts put malls before schools

a challenge.

In Ban Thung neighbourhood of Mae Sot, a city in western Thailand on the border with Myanmar, most Burmese migrant families can have up to 12 people living in a small home, made of bamboo and plastic. In an interview via email through Save the Children, which runs education projects in the refugee camps on the Myanmar-Thailand border,



12-year-old Lin says he is one of the fortunate ones to live in a concrete house with internet access and a computer.

“Many children [in the neighbourhood] have missed out on learning altogether. The teacher sends us weekly homework via Facebook Messenger, but many children don’t have any device or internet,” says Lin.

His mother, Nay, feels her son is not learning enough and only understands part of the online lessons. “Many children are only copying and have lost all interest in studying. I am educated and able to monitor my son’s progress, but 90 per cent of migrant parents are not educated and cannot help their children with homework,” says Nay via email.

Parents and caregivers have been first line responders to their children’s care and learning during the pandemic. While some parents are very capable of supporting their children, others are unable to teach their children for a multitude of reasons, including their own levels of education.

Chefchaoui says: “It is very important to get caregivers, parents and the community engaged because learning doesn’t happen only in schools. Never before in any emergency, we’ve been so focused on parents.

“This pandemic has brought increased levels of anxiety and stress to the household. Children are like a sponge and they absorb everything. We are encouraging parents to support their children’s learning in a play-based manner because well-being and learning continuity go hand in hand,” she adds.

Risk of permanent dropouts

It’s estimated that the disruptions to education resulting from the COVID-19 pandemic have set back progress in educational gains by 20 years.

To protect primary school children, UNESCO’s Global Education Coalition (GEC) has been assisting countries with tools to build their capacity in migrating from basic school learning to remote hybrid learning and train teachers in using online platforms. It is working with different partners in Africa and Latin America, in Asia with the Global Partnership for Education, and in the Caribbean with CARICOM to train teachers in developing open educational resources and remote learning modalities.

In the Pacific, GEC has worked in partnership with Moodle, an open-source online learning platform, together with other partners such as the Khan Academy to reinvigorate and develop further online platforms that existed before the COVID-19 crisis. It has also worked with Vodafone to offer “Zero Rating” access to digital data and resources in Samoa.

UNESCO has been providing policy support and advice to countries on how to open schools safely; prioritise teachers in the vaccination campaign; and organise remedial learning and ensure that the learning losses are compensated as soon as possible through different modalities.

The Framework for Reopening Schools provides practical and flexible advice for national and local governments to aid their efforts to return students to in-person learning.

However, with the more transmissible Delta variant of the novel coronavirus taking hold in the region and without adequate vaccines, school closures may continue in some countries such as the Philippines, which is one of the only two countries in the world yet to resume face-to-face classes since the lockdowns began in March 2020 according to UNICEF. The other is Venezuela.

How these erratic openings and closures, affecting the normality and the regularity of learning, will play out in the long term is anyone’s guess — there’s no precedent in the region.

With the current COVID-19 crisis unfolding, millions of children affected by school closures are now in danger of dropping out of the education system, according to UNICEF.

“We need to ensure that motivation and support from parents and the broader community is there to prevent more children from dropping permanently out of school because they can’t cope on their own when schools reopen,” Chefchaoui tells *SciDev.Net*.

Primary school kids need more support in study from parents and teachers unlike secondary school children, who may be able to self-study.

Rena Vaja from Victorias in the province of Negros Occidental in the Philippines says: “Children understand lessons better in a face-to-face class. With modules, it’s the parents who are studying. We’re the ones who answer while the children write. I am not even a graduate so I can’t teach like the teacher. I struggle between patience and frus-

tration, but we persevere because we want our children to be educated.”

In most Asian countries, almost every parent’s top priority is to provide quality education to their children.

The 37-year-old mother of four children has a nine-year-old son in Grade Three. She collects the printed modules from his school and she is grateful to the Teacher Fellow, who supports her child’s learning and reading. Teacher Fellows are trained and deployed by the non-profit organisation Teach for the Philippines to teach in high-need public schools.

In an interview through Teach for the Philippines translated from Filipino to English, Vaja says, “I can’t wait for the day when I can walk my child, smartly dressed in a uniform, to school. It would be good to return to proper learning and a routine as nowadays, kids spend all their time chasing birds, biking, playing. Also, it has been difficult to work on the farm and attend to children’s needs and study.”

Most Asian parents see education as a way to ensure their children’s success in life and give them a competitive advantage over their peers in the job market.

Janak Budhathoki wants to ensure that his 11-year-old daughter and six-year-old son get a good education even though he himself has only passed Grade Eight.

In a Zoom interview through his daughter’s schoolteacher at Yashodhara Bouddha secondary school in Thainatole in Lalitpur city, Nepal, he says: “Children in primary school are not matured to focus on study at home. They always have some pretext to escape from studying. During regular physical classes, they learn lots of other things too, such as manners and life skills.”

A substantial proportion of students and their parents reported that students learnt significantly less compared to pre-pandemic levels, according to UNICEF research. In Sri Lanka, 69 per cent of parents of primary school children reported that their children were learning “less” or “a lot less”.

For a longer version of this story, please visit our website www.scidev.net/asia-pacific

“The teacher sends us weekly homework via Facebook Messenger, but many children don’t have any device or internet”
Lin, 12-year-old student



HISTORY OF



The Science and Development Network (SciDev.Net) was officially launched on 3 December 2001 by David Dickson, its founding editor who also became its first director. SciDev.Net was founded as a science news service for the developing world. The birth of SciDev.Net resulted from a project set up by news staff at the journal Nature, with financial assistance from the Wellcome Trust, United Kingdom, to report on the World Conference on Science, in Budapest, in 1999.



The next edition created was Latin America and the Caribbean which started in 2003. It publishes in Spanish.

2001

2003

2002

2006

From the initial step, it has grown into various regional editions and today it boasts of six editions, covering different geographical locations of the world. The Sub-Saharan Africa edition was launched in 2002.



In 2006, the South Asia edition was born.



SciDevNet

In 2007, the need to serve French speakers in Africa saw the starting of Sub-Saharan Africa Francophone edition.



2007



In 2011, the South-East Asia and the Pacific edition was formally launched.

2011

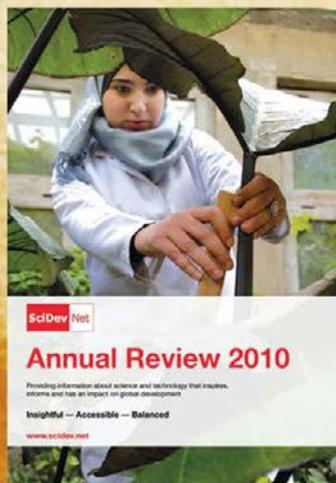
SciDev.Net achieved a milestone by reaching almost half a billion people across all channels.



2020

2010

In 2010, the Middle East and North Africa edition reporting in Arabic came into existence.



2017



In 2017, another significant move happened when *SciDev.Net* joined the Centre for Agriculture and Bioscience International (CABI) as its parent organisation. Up to this point, *SciDev.Net* had three directors — David Dickson, Tracy Irvine and Nick Perkins — over the last twenty years. But the post was abolished and replaced with that of Managing Editor, currently held by Ben Deighton. (Inset photo) The Asia Pacific edition was created from the merger of the South Asia and the South-East Asia and the Pacific editions in 2017.



History of SciDev.Net





et – the proud past



Fake news and info-wars: the battle ground for science journalists

By Ruth Douglas

Agrowing public appetite for science news presents both opportunities and pitfalls for journalists.

Public thirst for science news has never been greater. From climate change to the COVID-19 pandemic, science has taken centre stage on the media agenda, propagated and propelled by social media and 24-hour news.

Between 2014 and 2018, global research and development spending grew faster than the economy, with countries of all income levels prioritising the transition to digital and green economies, according to the UNESCO Science Report 2021.

For science journalists this has brought both opportunities and perilous challenges.

“Placing science into its human context is the biggest challenge while covering the huge volume of science and research,” says award-winning SciDev.Net journalist Rehab Abd Almohsen. “It needs a good training and a professional editor to mentor science writers on how to catch the human angle in a story that may sound

Iraq, to water disputes in the Nile Basin.

“Through the years, and after going through hundreds of discussions with editors and tens of pitch rejections, my brain become more ‘science oriented,’” says Abd Almohsen. “I can read a story on the explosion that hit Beirut port in Lebanon [in 2020], and develop it into a science story on the environmental effect of the blast, or the chemical material that caused the explosion, depending on the colour of the smoke.”

Signal and the noise

According to the UNESCO report, the number of researchers around the world grew three times faster than the global population between 2014 and 2018. By 2018 there were 8,854 million full-time equivalent researchers world-wide.

In step with this, scientific publishing has naturally become more prolific, with global output 21 per cent higher in 2019 than in 2015. And the COVID-19 pandemic has led to a further surge in research paper

for editors worldwide,” says Zoraida Portillo, a Lima-based journalist who first started writing for *SciDev.Net* in 2004.

“But in the context of the new coronavirus pandemic this has become a matter of concern because

they are not up to date. And when they are up to date, it is not research information that is published there, but, institutional information: ceremonies, nominations, appointments.

“There is very little or no publicity for studies carried out by local researchers, except often when these studies are carried out in partnership with an international research organisation or institution.”

Fighting info-wars

Another major challenge facing science journalists in the region, says Chongwang, is fake news:

“Fake news [stories] have become a real source of

concern for our profession. They are particularly numerous on the internet and, in our context in Africa, they mainly concern so-called drugs against common diseases.”

To guard against this, says Chongwang, the first step is to make sure that any information being considered for a story comes from a known and credible source. Speaking to the person at the heart of the information is essential, as is cross-checking by seeking an independent comment, he adds.

The global pandemic has brought the problem of fake news into stark relief. In the first three months of 2020, nearly 6,000 people around the world were hospitalised because of COVID-19 misinformation, according to research cited by the World Health Organization (WHO).

The need for accurate information in this context is clear, and fighting disinformation has become as integral a part of the journalist’s role as holding authorities to account.

During the pandemic, journalists have faced rumours on a daily basis and sought to counter them with accurate scientific information “that removes the aura of panic and fear”, says Hazem Badr, a reporter for *SciDev.Net*’s MENA edition for about a decade.

However, despite these challenges, “there is a point of light in the dark tunnel” says Badr, as media outlets allocate increasing page space to science news. “This space is still limited or non-existent in some publications, but there is a move that gives us hope that [things will get] better.”

“Most of my work as a journalist has been fact-checking news and publishing articles which clarify fake news related to science of health issues,” says Aleida Rueda, who works on SciDev.Net’s Latin America and Caribbean edition as an editor/consultant. “I think fake news is also a problem for society who may believe in fake remedies, fake science or fake specialists... When they see all these are not working they can start thinking all science issues are useless.”

never before have we had such a quantity of research (both peer-reviewed and preprint), [with] announcements and press releases almost daily. Furthermore, many of them have a high degree of uncertainty or become obsolete in a short time.”

Portillo says there are “some basic rules” to follow, such as rigorously evaluating potential stories, identifying the relevance of the subject, and understanding the intended audience.

“One basic question is: why is this important? What makes a true difference with other materials?”

Unearthing local research

In some parts of the global South, however, excess of scientific information is not the problem. Sourcing local science research, and ensuring local scientists are acknowledged, is the far greater hurdle.

“The biggest challenge we have in Sub-Saharan Africa is access to scientific information,” says Julien Chongwang, regional coordinator and editor for *SciDev.Net*’s Sub-Saharan Africa French edition.

“Scientific journals here are scarce and research institutes and universities do not always have a website. When they have websites, they are not always functional. When they are functional,

irrelevant to science, or to link a study to the well-being of people.”

Honing this instinct for a science story takes time, says Abd Almohsen, a Cairo-based journalist for the Middle East and North Africa edition who has covered stories ranging from the toxic fallout of armed conflict in

submissions.

In this fertile scientific landscape, there are rich pickings to be had for journalists. But distinguishing the signal from the noise is increasingly hard.

“To find worthwhile, relevant and reliable stories is always a challenge



SciDev.Net: visibility for science from the developing world



Luisa Massarani

The first time I heard about *SciDev.Net* was before it was born.

I am a Brazilian science journalist and I was following part of my PhD in the UK. Before going back to my country, I attended the Public Communication of Science and Technology Conference (PCST), held in February 2001 in the emblematic European Organization for Nuclear Research (CERN) in Geneva, Switzerland.

David Dickson (1947–2013) was one of the keynote speakers. By then he was the news editor of *Nature* and had worked before in *Science*, besides having a robust trajectory in science communication.

In his talk, David supported the idea of having a freely accessible website with reliable news on science and development in the developing world. He argued that there was a need to empower both individuals and communities in ways that would increase the impact of science and technology on sustainable development, and that would ultimately lead to a reduction of poverty.

David also highlighted that he had tested his ideas in a pilot experience linked to the ‘World Conference on Science for the Twenty-First Century: A New Commitment,’ held from 26 June to 1 July 1999 in Budapest, Hungary, by the UN Educational, Scientific and Cultural Organisation and the International Council for Science, in cooperation with other partners.

The funny thing is that, during his speech, he mentioned that the pilot experience worked particularly well in Brazil and he would like very much to know a Brazilian science

journalist. Later that day, I approached him, with my colleague Monica Macedo, and we said: “We are Brazilian science journalists”. We exchanged cards and kept in touch from a distance. This gave me the opportunity to follow the whole idea from its inception.

During the whole of 2001, he spent time applying for funds and persuading key organisations and stakeholders that it was a good idea. In December 2001, the baby was ready to be born; *SciDev.Net* was launched, with a unique and innovative philosophy of providing reliable information and views on science and development in the developing world. Training was also an important part of that

inspired by the vision of science for development and were able to expand the project worldwide.

In the very first year, he decided to create regional gateways — which later became a hallmark for *SciDev.Net*. The first one was Africa — a region he always had his eyes on. He very quickly came to realise that to empower the regions and make *SciDev.Net* more relevant and reliable, it was key to involve people from the regions themselves.

Then, it was our turn — that is, Latin America.

David had a philosophy of trusting in people and giving an opportunity to those who wanted to get on board with him while, at the same time, trying as far as possible to reduce risks. Always keeping me around and giving me opportunities to work with *SciDev.Net*, he contacted several people to check my background.

Finally, he made up his mind and invited me to coordinate the Latin American gateway, launched at the beginning of 2003. Step by step, the other regional gateways were created.

Science is indeed global, but science also needs to be local to be locally relevant. Science is directly linked to the politics, policies, economy, social and other aspects of each country and, as such, should be reported by people who understand the local context.

By empowering the developing world and allowing science information to circulate freely around the globe, *SciDev.Net* changed the geopolitics of science communication. David left us in 2013, but had prepared *SciDev.Net* to continue shaping the world of science journalism for years to come.

“**A key aspect of *SciDev.Net*, has been engaging journalists, scientists and other a stakeholders from the developing world in the process of communicating science and development.**”

philosophy.

A symbolic thing David succeeded in was putting both *Science* and *Nature*, fierce competitors, together on the website. It was a statement that *SciDev.Net* was beyond the borders of internal disputes. He made available, for free, papers for scientists in the developing world who couldn’t afford to read the two ‘Bibles’ of science. But he did something else too — he started pushing these two journals to become interested in looking at science from other lands.

As a result, *SciDev.Net* very quickly consolidated itself as a powerful force, with several publications making science visible from our countries. He also developed a strong network of people who were

SciDev.Net spurred the growth of science coverage in West Africa

My association with *SciDev.Net* started in 2010. The second phase of the SjCoop 2 (Science and Journalism in Cooperation) training programme of the World Federation of Science Journalists had just started. *SciDev.Net* was a major partner in this two-year training programme open to French-speaking Africa, English-speaking Africa and the Arab-speaking world.

After the launch of the programme for Francophone Africa in Bamako, Mali, the late founder and chief of *SciDev.Net*, David Dickson, commissioned an article from me and that was to be the start of a long and close association with the science portal. Till then an avid reader of *SciDev.Net*, here was a chance to also publish articles in it.

At the Bamako (Mali) meeting, we were encouraged to set up in our home countries associations of science journalists. Indeed, one of the objectives of the programme was to create spaces or networks that can serve as a relay for the practice of science journalism. Thus, was born the Association of Journalists and Scientific Communicators of Benin. But we still needed support and partnerships and *SciDev.Net* stepped in.

The World Conference of Science Journalists in Helsinki (Finland), in June 2011, afforded an opportunity for a long discussion with David. He showed a keen interest in the objectives, vision and projects of the Association. I continued to talk to him after returning from the conference and suggested that he organise a training course in science journalism for the benefit of West African journalists. He readily accepted.

In November 2011, the first training seminar for West African science journalists was held in Cotonou, Benin, with sponsorship from *SciDev.Net* and funding from IDRC. This training mobilised the participation of journalists from several countries of West and Central Africa and renowned trainers such as Gervais Mbarga from the

University of Moncton in Canada, Théodore Kouadio from Fraternité Matin and Florent Tiassou from Deutsche Welle.

In 2012, I initiated and organised, again thanks to funding from *SciDev.Net*, the first conference of West African science journalists. This event in Cotonou was partnered by the national associations of science journalists from Nigeria, Niger and Togo. The second conference took place in Niamey (Niger) in 2013 with continued support from *SciDev.Net*. The collaboration allowed dozens of West African journalists to be trained in science journalism.

Personally, this collaboration strengthened my skills in processing scientific or technological information. I became an advocate for science journalism in Benin and West Africa. My productions on various subjects, in French as well as English, made me known as the correspondent for *SciDev.Net* in the West African sub-region. I gained access to international research institutions such as the IITA (International Institute of Tropical Agriculture) and took part in several science events at the international level.

I cannot end without expressing my gratitude to David Dickson. He made science journalism a religion. He was its Pope and I am one of his humble sheep.



Christophe D Assogba, Cotonou, Bénin

SciDev.Net has enhanced the output of the AIP agency with science stories

On August 19, 2015, a group of around 15 journalists and other staff of the Ivorian Press Agency (AIP) gathered in Abidjan for a capacity-building workshop on the use of science information, organised

by *SciDev.Net* and funded by the Wellcome Trust.

The workshop focused on processing information on scientific research by the media. The idea was to enhance the participants' knowledge of the challenges involved, at the editorial and commercial levels. A series of articles was subsequently co-produced by AIP and *SciDev.Net*, allowing our journalists to strengthen their skills in writing science news articles.

Since then, the interest of AIP journalists in science stories has grown and by 2018, our website, www.aip.ci, has a Science and Technology section. AIP is now seen as a pioneer in science journalism in Côte d'Ivoire. Science topics relating to health, environment, agriculture, technologies, as well as research are part of our feed and the *SciDev.Net* website constitutes a source of science information from which to

select articles for republishing.

This partnership with *SciDev.Net*, represents for us a fruitful collaboration that is also professionally enriching. AIP is constantly solicited by the actors, structures and institutions of science and research for the coverage of their activities. We hope to set up, human and material resources permitting, a service specially dedicated to science.

As *SciDev.Net* celebrates its 20th anniversary, we would like, once again, to express our gratitude for support that has positively impacted the editorial offer of AIP.

Congratulations for all these years of work in the service of bringing science and development closer together through the media. Our wish is that *SciDev.Net*'s anniversary celebration — which comes at a time when the world is facing the deadly COVID-19 pandemic — marks the beginning of a new era for science journalism.

We need it more than ever before.

BARRY-SANA Oumou, director of the Ivorian Press Agency (AIP)





SciDev.Net and my career in science journalism

Daniela Hirschfeld

Journalism can be a door to many worlds. Journalistic work involves accessing and processing information and sharing it with society and that provides an opportunity to meet people, go places and be involved in activities from a privileged position. When journalistic work transcends the borders of the country in which you live, journalism is also an open passport to travel and experiences.

When I joined *SciDev.Net* 16 years ago, it was after a six-year stint as a science journalist in Uruguay, a small country with three million inhabitants isolated from the main cities of the world. The contrast was immense. I did not know too many colleagues in the neighbouring countries but working for *SciDev.Net* truly

broadened my professional circle. I was constantly in contact with colleagues not only Latin America but also from other continents.

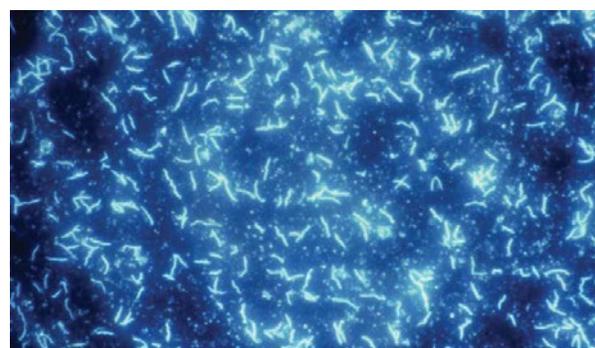
Meeting and interacting with them allowed me to appreciate that while I had much in common with journalists from Europe or Africa, there were aspects that differentiated us. Learning from the experiences of others and applying them to my work resulted in better journalism. In short, widening the sources of scientific information helped me deliver a better product to Uruguayan society. Besides, getting to meet people from all over the world was highly rewarding on its own.

A bonus was representing my country at international congresses and gaining access to international science centres. Over the years, as a part of the Latin America editorial team of *SciDev.Net*, I also developed skills that are required in any international news agency.

With 23 years of experience in science

journalism, the bulk of it at *SciDev.Net*, I can say that I have the capability of passing on valuable experience to young aspirants and encouraging them to take to the fascinating path of global science journalism.

I see *SciDev.Net* as my professional home. It is a place where I work side-by-side with an incredible group of Latin American journalists who produce amazing work in the region.



A platform for stories on the developing world

Sanjeet Bagchi

I believe that media outlets across the world should carry more stories on developing countries. The reason is simple: I have seen that, to control, eliminate or eradicate a disease or condition — be it polio, COVID-19, malnutrition or anemia — success largely depends on initiatives taken up and work done with respect to developing countries.

I have often heard friends and colleagues complaining about developing countries failing to develop mechanisms to maintain public relations. Since people in developing countries are usually not included as target audience by international media outlets, fewer stories are commissioned on the problems of these countries. It naturally follows that fewer journalists from developing countries get to write for international media.

As a medical doctor, my worldview revolves around the subject of health, especially in South Asia where I live and work. So, when I first spotted *SciDev.Net* on the internet, somewhere around 2004, I was delighted to find that it had a focus on public health in

the developing countries. Here was a website with health and science related news and feature stories based on the latest research and relating to the developing world. It was fascinating to log on to the *SciDev.Net* website and read up on health-related research relevant to the countries in Sub-Saharan Africa, South-East Asia and Latin America.

Gradually, I ventured into writing for *SciDev.Net*, my favourite website. I started off with issues around malaria, tsunami, kala-azar, and river blindness. In 2006, I was delighted to be part of the *SciDev.Net* news team that won the award for the “best science journalism on the world wide web” by UK’s science writing body, the Association of British Science Writers (ABSW). The citation mentioned *SciDev.Net*’s significant “online coverage of the consequences of the tsunami”.

If I have been able, over the years, to contribute a number of stories, it is thanks to the encouragement by *SciDev.Net*’s great team of regional coordinators, editors and other staff that work tirelessly to produce news, features, podcasts, interviews and opinions on health, environment, climate change and other subjects that are so relevant to the developing world.



My 20 years celebration testimony

By Rehab AbdAlmohsen

It's almost nine years since I started off as an intern with *SciDev.Net*, but I still remember the moment I received an email from David Dickson, telling me that I had been awarded an IDRC/*SciDev.Net* science journalism fellowship for 2013. Best of all David, my role model in science journalism, was going to be my mentor for a whole year — a dream come true.

The internship was exactly what I needed at that time. I eagerly visited some of the science media houses and establishments in the UK, including *New Scientist*, *Research Africa*, and the Royal Society. I also worked closely with colleagues at the London office and developed a better understanding of the different

phases of editing in science journalism.

Although I had been writing for *SciDev.Net* well before winning the internship, the new challenge was more fieldwork, many more conferences in different countries, and actively searching for good story ideas.

2013 turned out to be the most important milestones in my entire career. I still turn back to some of the stories I had produced as an intern and read David's comments. I will never forget the time when I was confused about writing an intro for one of my stories. David's advice was, "ask yourself, what do you want to say? What is this story about? And say it out loud — and that is your introduction."

This year, celebrating my award at the Nile Media competition, for coverage of the Nile, I know that I owe much to *SciDev.Net*. I remember a quote from the novelist Virginia Woolf: "I am made and remade continually. Different people draw different words for me"




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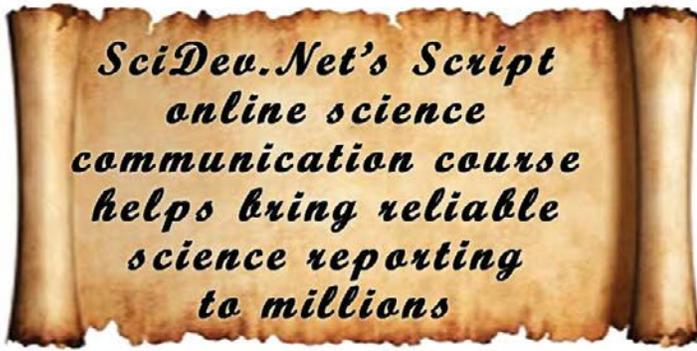
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Training by SciDev.Net

In brief: a lack of science communication training for journalists in Sub-Saharan Africa affects the quality of science reporting and, therefore, the evidence base of information that policymakers rely on to tackle poverty.

In 2018, SciDev.Net launched Script, a free online training programme for journalists and scientists to improve the flow of reliable, research-based scientific information. Over 3,000 journalists and researchers have taken the course. A small number of the many articles produced by graduates that we were able to track have reached over 1 million people including policymakers.

Why it matters: in a time when reliable, research-based scientific information is critical for the public and policymakers, Script provides journalists with the skills to report science accurately and effectively.

The big picture: this free, online science communication course can help to improve the skills of journalists and scientists globally, including poorer regions where such training might not be available, or places where COVID-19 restrictions prevent in-person training.

By the numbers: by taking the course, certain Script graduates have doubled the number of science stories they have published, and news outlet mentees produced 26 stories that were heard or read by 1 million members of the general public in Kenya, Nigeria and Tanzania. This demonstrates how one course can radically boost the number of published science stories and how these stories can reach and influence millions.

On 27 March 2018, *SciDev.Net* launched a training programme for journalists and scientists called Script. The overall aim of Script was to strengthen science communication and science journalism in English-speaking countries in Sub-Saharan Africa, providing the public and specific audiences such as policymakers with a better understanding of complex scientific issues.

More specifically, *SciDev.Net* aimed for Script to play an important role in presenting policymakers with high-quality science journalism, thereby helping them achieve more evidence-based poverty alleviation interventions. *SciDev.Net* also sought to improve governance by giving journalists, scientists and the public a greater capacity to hold policymakers to account based on scientific information.

Initially, *SciDev.Net* offered two Script courses delivered online and at universities: media skills for scientists and science communication skills for journalists. Students took the course via a digital hub with six practical guides and online networking opportunities, all of which were free at the point of use.

Script strengthened the ability of communication professionals, journalists and scientists to learn from each other. While we cannot know the exact number of articles published by Script graduates, a closer look at a sample shows that five of them published 158 stories upon completing the Science Communication Skills for Journalists

course, of which 124 stories were entirely science-focused, compared to 46 in the two years before taking the course.

Script graduate Abet Tonny started publishing stories only after taking the course. He has now published 14 science stories and 21 health and development stories. Gilbert Nakweya has published 44 science stories, twice the number of stories he published in the two years before he took the course.

Two media outlets in the project's target countries — Nation in Kenya and Radio Nigeria — mentored six Science Communication Skills for Journalists students. They produced 26 stories, which were heard or read by 1 million people in Kenya, Nigeria and Tanzania. This reach contributed to *SciDev.Net's* goal of increasing awareness of reliable, research-based scientific information.

Social media engagement with the articles reveals that graduates reached *SciDev.Net's* target audiences: academics, policy influencers and policymakers liked or retweeted 17 science stories written by Script online graduates.

Script website, newsletters and social media in numbers

Dedicated 'Script Updates' section of SciDev.Net website	eNewsletters	Facebook group and page	Twitter account
8,177 unique page views	32 eNewsletters 17,500 recipients 6,360 unique opens	Group: 323 members Page: 1,007 followers Reach: 3,390,566 people*	Followers: 783 Reach: 314,073 people*

* In Sub-Saharan English-speaking Africa

Tree planting feature tops *SciDev.Net* journalism awards

From the perils of tree planting to teaching robots in the Andes, *SciDev.Net* has announced the winners of its first global journalism awards in recognition of the impactful contributions of its writers in a year marked by unprecedented challenges.

The awards were launched last year in order to recognise the work of *SciDev.Net*'s contributors around the world.

"The high quality of these articles is a great testament to the work we are doing at *SciDev.Net*," said managing editor Ben Deighton.

The winners were chosen by *SciDev.Net*'s Editorial Advisory Group, based on a shortlist drawn up by *SciDev.Net* editors.

Winner of the best news article went to Zoraida Portillo for her story Robots help learning in a time of COVID, about the use of robots to teach children in remote parts of Peru during the COVID-19 lockdown.

Global tree pledge frenzy threatens ancient grasslands provided an "absorbing, deeply researched and excellent treatment of a complex and controversial subject, told extremely well", the judges said.

Irwin said she was "delighted to win this because it shows what can happen when you give journalists the opportunity to dig deep".

"There are powerful reasons why the world should be obsessed with planting trees, but indiscriminate planting is widespread and causing many problems – to livelihoods, to ecology and even to the central cause of drawing down carbon," she said.

"The plight of the world's unloved grasslands seemed to encapsulate many of these troubles. The detective work of Madagascan ecologists investigating the riches that lie between the grass blades and in the soil below [...] proved to be a great way of telling the story."

The judges said: "With its deep reporting and bold counter-intuitive message, Aisling Irwin's article was a compelling expression of *SciDev* at its best. A thoroughly deserving winner."

Runner up in the features category was Indian journalist Sanjeet Bagcchi for his article Asia Pacific's runaway white elephant projects, about exorbitant Asian infrastructure projects that have failed to get off the ground.

Hazem Badr, of Egypt, received the prize for the best interview with his Q&A with a member of the Oxford vaccine team, creators of the COVID-19 vaccine, in July 2020. The interview, conducted via the videoconferencing platform Zoom, was published on *SciDev.Net*'s Arabic language edition.

"Winning the award for this piece was of special importance to me, as it revolves around one of the most

promising vaccines, the Oxford-AstraZeneca vaccine," Badr said. "It was a few months after the start of the pandemic, so this dialogue was very appropriate and [...] greatly contributed to the knowledge of the Arab scientific community."

The judges said: "Topical and well-timed, long before the approval of the vaccine, this interview gave voice to a scientist from one of *SciDev*'s core regions [...]. It offered scope for strong impact in combating vaccine hesitancy and in answering people's common questions about the vaccine trials, with answers still relevant today."

Badr was also runner-up in the multimedia category for his photo story, Egypt's shrimp women. Top prize for that category, however, went to Ghislaine Deudjui and Julien Chongwang, of Cameroon, and Gilbert Nakweya, from Kenya, for their report on toxic food preservatives, Poison used to conserve food in Africa.

"Congratulations to all winners, runners-up and shortlisted entries, and many thanks to all of those who helped put together these awards," added Deighton.



The judges described it as "a touching story of impact and innovation that encapsulated the best of *SciDev* values: entertaining, motivating and inspiring, with personality and human insight".

"The message is very relevant not only to the Andes rural locations that benefited from the robot but to children all over the world struggling to get a proper education under lockdown," they said.

Runners up were Syriacus Buguzi, of Tanzania, and *SciDev.Net* deputy editor, features, Fiona Broom, for their collaborative story New malaria mosquito threatens mass outbreaks in Africa.

"From original reporting on the dangers of gender-blind coronavirus policies and the restrictions on Palestinian researchers, to innovative methods to help patients find their medicines in pharmacies, the high quality of the news article of the year submissions was particularly strong," the judges said.

Winner of the best feature category, and the overall winner, was UK-based journalist Aisling Irwin, for her *SciDev.Net* Investigates story on the adverse impacts of poorly planned tree planting campaigns.



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