# Knowledge for Development

Observatory on Science, Technology and Innovation for ACP Agricultural and Rural Developmen

"K4D lets scientists and policymakers express themselves"

### July 2011 newsletter

Highlighting the latest additions to the site **Knowledge for Development** 

Follow us also on Twitter and Facebook

Stay up-to-date with the K4D RSS feeds

Don't forget to register online

Feature dossier
Developments
Publications
Events
Grants & Competition
Jobs
Organisations

#### Feature dossier: Ethics in science

#### Towards a Global Ethics Science Code

New lead article by Melissa Anderson, University of Minnesota, USA



Research integrity and scientific misconduct are issues of global concern. Science itself is a global enterprise. Academic research is increasingly international, as communication technology enables worldwide collaboration. The trustworthiness of scientific findings is fundamental to the progress of science everywhere. Falsification of records or results, dishonesty, misrepresentation and other inappropriate acts all compromise science. They waste scarce resources that could be used for legitimate scientific research and jeopardize future funding of science by government and private organizations.

Certain aspects of cross-national research make concerns about integrity even more critical. Collaborators from different countries may work under different laws, regulations, customs and assumptions concerning the conduct of research. What is acceptable in one country may be illegal in another. At present, however, there is no organization or other body with global responsibility for research integrity. There is no worldwide agreement on what constitutes research integrity or, in fact, how the term "integrity" should be understood, given that it cannot be translated directly into some other languages. Likewise, scientific misconduct is open to interpretation, as countries exhibit different levels of tolerance for plagiarism or inaccurate authorship lists.

In the absence of international regulatory bodies and other oversight mechanisms, codes of conduct for research integrity are a promising means to foster global agreement on the responsible conduct of research. The need for international guidance on research integrity was identified at the first conference and addressed at the second through the publication of the Singapore Statement on Research Integrity in 2011, currently available in 14 languages. The Singapore Statement exhorts scientists to report inappropriate conduct and institutions to develop procedures for responding to allegations in ways that protect those who make allegations in good faith. Based on the Statement's principles and responsibilities, national and cross-national bodies can develop more specific guidance that addresses points of disagreement, different activities undertaken by scientists in the course of their work, and different approaches to handling deviations from responsible research practice.

The intended outcome of all efforts to promote research integrity nationally and globally should be the assurance that scientific findings are trustworthy.

Read the whole article:

knowledge.cta.int/en/content/view/full/14035

## The European Code of Conduct for Research Integrity endorsed by European Science Foundation's Governing Council

knowledge.cta.int/en/content/view/full/14037

The European Science Foundation (ESF) <u>announces</u> the endorsement of *The European Code of Conduct for Research Integrity* by its Governing Council in Lisbon on 22-23 June 2011. The code, which was launched at the World Conference on Research Integrity held in Singapore last July, was developed from a series of meetings and workshops involving the European Science Foundation Member Organisations which are 78 national funding bodies, research-performing agencies, academies and learned societies from 30 countries. They worked in close collaboration with the All European Academies (ALLEA). This code offers a reference point for all researchers, complementing existing codes of ethics and complying with national and European legislative frameworks. Representing an agreement across 30 countries on a set of principles and priorities for self-regulation of the research community, it provides a possible model for a global code of

Explore the Ethics in science dossier on K4D.

#### International Conference on Innovations in Extension and Advisory Services

-+ REMINDER : Registration still open for self-sponsored delegates - 9th September deadline

knowledge.cta.int/en/content/view/full/13469

#### Over 250 abstracts and 500 Requests for Sponsorship

Registration for self-sponsored delegates is still open. The blogging, tweeting and E-discussions will begin in earnest in August. Only registered users on the conference website will have full access to all the conference facilities.

Visit the conference website <u>extensionconference2011.cta.int</u> to register online to be part of this unique extension community or attend the conference, request a booth, participate in discussions, post documents, photos and videos. In response to the 15 July deadline, the organizers received over 250 abstracts and 500 requests for sponsorship. They are now seeking additional sponsorship to accommodate as many delegates as possible who responded before the 15 July deadline and need sponsorship. Decisions on sponsorship and abstracts will be communicated after August 15.

Back To Top

#### **Developments** | Follow the latest RSS feeds for this section

#### New biofuel sustainability assessment tool and GHG calculator released

knowledge.cta.int/en/content/view/full/14039



Researchers at Empa (the Swiss Federal Laboratories for Materials Science and Technology), at the Swiss Roundtable on Sustainable Biofuels (RSB) and at the HTW Berlin, Germany, developed an online tool to assess the sustainability of biofuel production. The new tool allows users to perform a self-assessment against the Principles and Criteria of the <u>RSB</u> and a self-risk assessment. The online tool also calculates greenhouse gas (GHG) emissions of biofuels for each lifecycle production step, from farming to final fuel distribution. The new tool is

directly accessible <a href="here">here</a>. (AlphaGalileo, 16/6/2011)

### Major breakthrough on how viruses infect plants

knowledge.cta.int/en/content/view/full/14042



Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) plant scientists have discovered a genetic mechanism that enables viral organisms, in this case the Cucumber Mosaic Virus (CMV), to infect hosts and cause diseases. One of the scientists, Dr Ming-Bo Wang explained: "CMV, accompanied by a special type of viral particle called a 'satellite', causes its distinctive yellowing symptoms in plants by slicing a gene that makes

chlorophyll, the green pigment in leaves. By preventing the production of chlorophyll, the virus causes the leaves to become partially or entirely yellowed which dramatically affects growth and productivity." (Physorg, 14/7/2011)

#### European boost for coordinated research on Integrated Pest Management

knowledge.cta.int/en/content/view/full/14045



A new EU Collaborative Working Group on Integrated Pest Management (IPM) has been established under the Standing Committee on Agricultural Research (SCAR) umbrella. SCAR was created in 1974 to provide advice on agricultural research to the European Commission and to Member States. The Collaborative Working Group on Integrated Pest Management for the reduction of pesticide risks and use, launched in May 2011, will provide recommendations to SCAR and to the Directorate-General for Research and Innovation. The French

Ministries of Agriculture and Research proposed the creation of this Collaborative Working Group (CWG) because they consider that many aspects of plant protection are best addressed at the European level. As all Member States are involved in developing their National Action Plan (NAP), much can be gained by benchmarking, learning from each other and by looking at the type of research supporting NAPs across Europe. (Endure Network, 26/6/2011)

#### Universities in West Africa share resources for new biotechnology masters programme

knowledge.cta.int/en/content/view/full/14047

Seven West African universities have created a masters degree in tropical biotechnologies. The universities are Cheikh Anta Diop of Dakar in Senegal; Abobo-Adjamey of Abidjan in Côte d'Ivoire; Abomey-Calavi of Cotonou in Benin; Abdou Moumouni of Niamey in Niger; Bamako in Mali; Nouakchott in Mauritania; and Ouagadougou in Burkina Faso. The countries are all members

of the Economic Community of West African States, ECOWAS. The programme is to address the limited capacity of present human resources in this branch of agricultural research. The course will be given online to ensure quality and to make it accessible to all students in the region. From 2012 on, the masters will offer two specialisations, in plant biotechnology and in agricultural and environmental biotechnology. (University World News, 3/7/2011)

## Global plant database set to promote biodiversity research and Earth-system sciences

knowledge.cta.int/en/content/view/full/14049



The world's largest database on plants' functional properties, or traits, has been published. Scientists compiled three million traits for 69,000 out of the world's +/- 300,000 plant species. The achievement rests on a worldwide collaboration of scientists from 106 research institutions. The initiative, known as TRY, is hosted at the Max Planck Institute for Biogeochemistry in Jena, Germany and promises to become an essential tool for biodiversity research and Earth-system sciences. Plant traits – their morphological and physiological properties – determine how plants compete for resources, e.g. light, water, soil nutrients, and where and how fast they can grow. Ultimately they determine how plants influence ecosystem properties such as rates of nutrient cycling, water use and

carbon dioxide uptake. A major bottleneck to modelling the effects of climate change at ecosystem and whole-earth scales has been a lack of trait data for sufficiently large numbers of species. The first release of the TRY database was published this week in the journal Global Change Biology. The availability of plant trait data in the unified global database promises to support a paradigm shift in Earth system sciences. Indeed, analyses of the TRY database demonstrate for the first time on a global scale that most of the observed trait variation is represented by differences among plant species. (Eurekalert, 1/07/2011)

#### Coastal Capital: Economic valuation of coastal ecosystems in the Caribbean

knowledge.cta.int/en/content/view/full/14050



The World Resources Institute's (WRI) Coastal Capital series was launched in 2005 and aims to provide decision-makers in the Caribbean with information and tools that link the health of coastal ecosystems with the attainment of economic and social goals. WRI and its local partners have conducted economic valuation studies of coral reefs and mangroves at national and subnational levels in five countries: Trinidad and Tobago, St. Lucia, Belize, the Dominican Republic and, in June 2011, Jamaica. WRI has published (June

2011) a Working Paper on the coastal capital of <u>Jamaica</u> with an interesting <u>field report</u>. The paper offers a detailed evaluation of the contribution of coral reefs to the Jamaican economy, as well as the benefits that will be lost if coral reefs degrade further. (<u>World Resources Institute</u>, 6/2011)

Back To Top

#### Selected publications | Follow the latest RSS feeds for this section

## Traditional knowledge in policy and practice: Approaches to development and human well-being

knowledge.cta.int/en/content/view/full/14062

Edited by B. Pisupati and S.M. Subramanian; United Nations University Press, 2010. Traditional knowledge (TK) has contributed immensely to shaping development and human well-being. Its influence spans a variety of sectors, including agriculture, health, education and governance. However, in today's world, TK is increasingly underrepresented or under-utilized. Further, while the applicability of TK to human and environmental welfare is well-recognized, collated information on how TK contributes to different sectors is not easily accessible. This book focuses on the relevance of TK to key environment- and development-related sectors, discusses the current debates within each of these sectors and presents suggestions as to how TK can be effectively integrated with conventional science and policy. A valuable resource to researchers, academics and policymakers, Traditional knowledge in policy and practice provides a comprehensive overview of TK, and its links and contributions to social, economic, environmental, ethical and political issues.

#### **Biosafety Resource Book**

knowledge.cta.int/en/content/view/full/14063

By The Food and Agriculture Organization (FAO), 2011.

The <u>Biosafety Resource Book</u> stems from experience gained in biosafety capacity development projects and is based on the materials developed by the lecturers who have taught in the FAO training courses organized to date. It has been prepared in response to an expressed need, with the purpose of being used as a training tool in future activities. It also aims at providing biosafety regulators, policy-makers and members of national biosafety committees with reference materials that can be readily consulted beyond the training events, when the need arises. Special attention

has been paid to avoid technical jargon and to keep the modules scientifically accurate as well as accessible to non-specialists.

#### Biotechnologies for agricultural development

knowledge.cta.int/en/content/view/full/14064

By The Food and Agriculture Organization (FAO), 2011.

This <u>book</u> represents the proceedings of the FAO international technical conference dedicated to Agricultural Biotechnologies in Developing Countries (ABDC-10) that took place in Guadalajara, Mexico on 1-4 March 2010. The first section of the proceedings contains ten chapters with an extensive series of FAO background documents prepared before ABDC-10. They focus on the current status and options for biotechnologies in developing countries in crops, livestock, forestry, fisheries/aquaculture and food processing/safety, as well as on related policy issues and options, in particular about targeting agricultural biotechnologies to the poor; enabling research and development (R&D) for agricultural biotechnologies; and ensuring access to the benefits of R&D. The second section of this document contains five chapters dedicated to the outcomes of ABDC-10, namely the reports from parallel sessions of sectoral, cross-sectoral and regional interest, most of which were organized by different intergovernmental and nongovernmental organizations and regional fora; keynote presentations; and the conference report adopted by delegates in Guadalajara on the final day of the conference.

#### Herbicide tolerance and GM crops

knowledge.cta.int/en/content/view/full/14065

Greenpeace international, June 2011.

This <u>study</u> by Greenpeace examines the use of glyphosate, the active ingredient in many herbicides sold throughout the world, including the well-known formulation, Roundup. 'Glyphosate based herbicides are used widely for weed control because they are non-selective; glyphosate kills all vegetation. Glyphosate has been promoted as "safe". However, mounting scientific evidence questions the safety of glyphosate and its most well known formulation, Roundup. The evidence detailed in this report demonstrates that glyphosate-based products can have adverse impacts on human and animal health, and that a review of their safety for human and animal health is urgently needed. The widespread and increasingly intensive use of glyphosate in association with the use of GM (genetically modified, also called genetically engineered or GE) crops poses further risks to the environment and human health'. (Pambazuka, 30/6/2011)

#### Blue Frontiers: Managing the environmental costs of aquaculture

knowledge.cta.int/en/content/view/full/14066

By S. J. Hall, A. Delaporte, M. Phillips, M. Beveridge and M. O'Keefe, WorldFish Center, June 2011.

Blue frontiers is a new publication from the WorldFish Center and Conservation International. The report analyzes how the global aquaculture industry uses natural resources and its impacts on the environment. It makes a broad-brush comparison of aquaculture with other animal food production systems and extrapolates from past history to look forward and identify potential future impacts. The report also proposes important recommendations for policy makers and scientists engaged in debate on the future of food production and nutrition security. This global review is a comprehensive analysis of global aquaculture production across all major species and farm production systems. The report aims to inform policy makers about the impacts of aquaculture on the environment and to stimulate debate on the optimal animal food production systems for tomorrow.

Back To Top

## **Events | Follow the latest RSS feeds for this section**

#### Global Science Conference on Climate-Smart Agriculture (GSCSA 2011)

knowledge.cta.int/en/content/view/full/14068

Dates: 24-25 October 2011

Venue: Ede/Wageningen, The Netherlands Deadline for registration: 1 September 2011

This international conference is organised by Wageningen UR, in close collaboration with the Dutch Ministry of Economic Affairs, Agriculture and Innovation and the World Bank and will be held from 24 – 25 October 2011 in Ede/Wageningen, The Netherlands. This scientific conference in Wageningen builds on these processes, and provides also the knowledge and science link between the November 2010 Global Conference on Agriculture, Food Security and Climate Change in the Hague and the African conference in Addis Ababa which preceded it in September 2010, and the follow up global conference planned in Vietnam for early 2012. During The Hague Conference, around 70 Ministers developed a Roadmap for Action highlighting the critical role of agriculture to achieve global climate change and food security goals.

The target audience (maximum 150-200 in total) are scientists and policy makers from OECD and developing countries, private and public sector as well as other non-state actors. Invitations will be targeted at the suggestion of the organizing and executive committees. Participants will be invited to express their interest, but selection may be needed because of limited space. The conference is free of charge. Depending on budget, fellowships will be made available for young scientists and scientists from developing countries.

Further information about the conference theme and the preliminary program and other practical information can be found on: <a href="http://www.gscsa2011.org/">http://www.gscsa2011.org/</a>. This site can also be used for registering (as of 28 July). Please register as soon as possible, but before 1 September 2011.

#### E-AGRI training workshop: Crop yield forecasting based on remote sensing

knowledge.cta.int/en/content/view/full/14069

Dates: 11-14 October 2011 Venue: Rabat, Morocco

<u>E-AGRI</u> is a project funded by the European Commission in the 7th framework Programme (FP7). It aims to disseminate the crop monitoring technologies developed by European institutions in Africa and Asia. The workshop is organized by INRA in collaboration with the Vlaamse Instelling voor Technologisch Onderzoek (VITO, Belgium). The objective of the workshop is to present the yield forecasting methods developed in the European Union and Morocco. The test areas in Morocco and in the Province of Anhui, China will be used as the study cases. The event will take place from 11-14 October 2011 in Rabat, Morocco. Contacts for more details: riad.balaghi@gmail.com , qinghan.dong@vito.be.

#### 2nd All Africa Horticulture Congress

knowledge.cta.int/en/content/view/full/14027

Dates: 15-20 January 2012

Venue: Skukuza Restcamp, Kruger National Park, South Africa

The 2nd ALL AFRICA HORTICULTURE CONGRESS (AAHC2) will take place from 15-20 January 2012, at Skukuza Conference Centre in the world-renowned Kruger National Park. The Congress will be hosted by the Southern African Society for Horticultural Sciences (SASHS) and will take place under the aegis of the International Society for Horticultural Science (ISHS). The Congress aims to bring together scientists involved in diverse horticultural endeavours in Africa and to provide a platform that will encourage a spirit of communication, collaboration and sharing of knowledge and expertise.

## AVRDC Regional symposium "High Value Vegetables in Southeast Asia: Production, Supply, and Demand"

knowledge.cta.int/en/content/view/full/14022

Dates: 24-26 January 2012 Venue: Chiang Mai, Thailand

This regional symposium hosted by AVRDC – The World Vegetable Center, Thailand's Horticultural Research Institute, ASEAN-AVRDC Regional Network (AARNET), and Vegetable Science International Network (VEGINET) aims to foster sustainable vegetable production, improved market access, promotion of vegetable consumption for health and vitality, industry profitability and competitiveness, structural change, and the vegetable industry's reputation in the region. Abstracts are invited for papers on germplasm, breeding, seed and plant health, integrated crop management, indigenous vegetables, organic production, postharvest technologies, economics and marketing, food safety, health and nutrition, supply chains, climate change, gender equity, urban and peri-urban horticulture, and more.

Back To Top

## **Grants and competitions | Follow the latest RSS feeds for this section**

#### 2012 course intake: Postgraduate Diploma in Pesticide Risk Management (DPRM)

knowledge.cta.int/en/content/view/full/14029

Deadline for application: 30 September 2011

Course starts February/March 2011

The Postgraduate Diploma in Pesticide Risk Management (DPRM), offered by the School of Public Health and Family Medicine, University of Cape Town, South Africa, aims to equip candidates with the knowledge and skills to enable them to practice as a Pesticide Risk Manager in line with the International Code of Conduct on the Distribution and Use of Pesticides. This <u>brochure</u> provides the detail needed to assist prospective candidates in deciding whether the Postgraduate Diploma in Pesticide Risk Management (DPRM) programme suits their needs. The DPRM programme is structured around the International Code of Conduct on the Distribution and Use of Pesticides (the Code) published by FAO and WHO. The DPRM is a two year part-time flexible learning programme with a substantial distance learning component using internet based educational technology.

## NEPAD's and CTA's "Youth and Women Photo and Essay Competition"

knowledge.cta.int/en/content/view/full/14023

Deadline for application: 15 August 2011

The New Partnership for Africa's Development (NEPAD) Agency and the Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA) have joined forces in celebrating NEPAD's 10th Anniversary. The two institutions are jointly organising an <a href="essay competition">essay competition</a> on the theme "Looking at ICTs and entrepreneurship in agriculture and rural development through the eyes of women and the youth" and a <a href="photo competition">photo competition</a> on the theme: "Looking at ICTs, agriculture and

climate change in Africa through the eyes of women and the youth".

Back To Top

#### Jobs | Follow the latest RSS feeds for this section

#### 7 new vacancies at CTA

knowledge.cta.int/en/content/view/full/14028

Join CTA at an exciting time for agriculture - the Centre enters a new chapter in its development with the launch of the Strategic Plan for 2011-2015. Seize the opportunity to join CTA and contribute to its mission of advancing food and nutritional security, increasing prosperity and encouraging sound natural resource management in ACP countries. For full details on all the positions available click here.

Back To Top

#### Organisations | Find more organisations on our website

#### Global Research Alliance on Agricultural Greenhouse Gases

knowledge.cta.int/en/content/view/full/14072



GLOBAL The Global Research Alliance on Agricultural Greenhouse Gases was launched in December 2009 in the margins of the UN climate change conference in CH Copenhagen, Denmark and now has more than 30 member countries. The NCE Alliance is founded on the voluntary, collaborative efforts of countries and provides a framework for voluntary action. It is designed to increase ON AGRICULTURAL international cooperation and investment in research activities to help reduce GREENHOUSE GASES the emissions intensity of agricultural production systems and increase their

potential for soil carbon sequestration. The Alliance aims to do this in a way that will help improve the efficiency, productivity, resilience and adaptive capacity of agricultural systems, thereby contributing in a sustainable way to overall mitigation efforts, while still helping meet food security objectives. Members of the Alliance aim to deepen and broaden existing mitigation research efforts across the agricultural sub-sectors of paddy rice, cropping and livestock, and the cross-cutting themes of soil carbon and nitrogen cycling and inventories and measurement issues, including by conducting an annual stock take of research activities to guide the development of their research activities. The Alliance promotes an active exchange of data, people and research to help improve the ways that agricultural greenhouse gas research is conducted and to enhance participating countries' scientific capability.

#### **Crops for the Future Research Centre**

knowledge.cta.int/en/content/view/full/14074



The University of Nottingham Malaysia Campus is to co-host the Crops for the Future Research Centre (CFFRC) in partnership with the Government of Crops Malaysia. The centre is specifically designed to evaluate underutilised crops for the from around the world. It is at the heart of an international effort to seek out which crops have the potential to be grown for human sustenance or on a commercial basis for food, pharmaceuticals or biomaterials in the climates of the future. With 18,000 indigenous species in its region and funding of nearly

\$40m from the Malaysian Government, CFFRC has been given the mandate to carry out research on a whole range of underutilised crops. Whilst the research centre may be completed over the next 18 months, CFFRC activities will start almost immediately using facilities already available at The University of Nottingham campuses in Malaysia and the UK. (via AlphaGalileo)

Back To Top

### "K4D lets scientists and policymakers express themselves"

Follow us also on Twitter and Facebook

Stay up-to-date with the K4D RSS feeds

Don't forget to register online

To unsubscribe, send a blank email to leave-knowledge-en@lists.cta.int

If you have been forwarded this newsletter and would like to receive it, please visit the Knowledge for Development website and register for the email newsletter; or send a blank email to joinknowledge-en@lists.cta.int

Publisher: CTA

Coordinating editors: Judith Francis, CTA and Rutger Engelhard, Contactivity bv.

Research: Cédric Jeanneret-Grosjean, Contactivity bv.





CTA is an institution of the ACP Group of States (Africa, Caribbean and Pacific) and the EU (European Union), in the framework of the Cotonou Agreement and is

financed by the EU.