



*"K4D lets scientists and policymakers express themselves"*

February 2012 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 articles](#)

[CTA S&T Programme](#)

[Developments](#)

[Publications](#)

[Events](#)

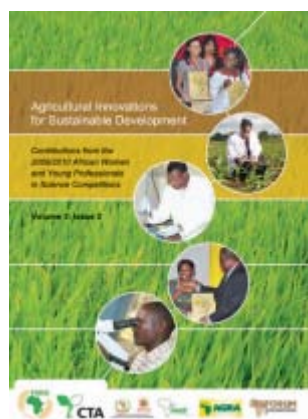
[Grants & Competitions](#)

[Jobs](#)

[Organisations](#)

## Feature articles: 'Agricultural Innovations for Sustainable Development'

Selected articles from the 2011 CTA/FARA publication 'Agricultural Innovations for Sustainable Development' Volume 3, Issue 2



In 2008, CTA and FARA, in collaboration with several African partners, launched Africa-wide science competitions targeting women and young professionals. The competitions sought to promote excellence and recognize and reward women and young professionals whose scientific contributions and technological innovations have made a positive impact on agricultural development and rural livelihoods in Africa. The first two series of competitions (2008/2009 and 2009/2010) were successful and drew attention to the challenges faced by women and young professionals and the need for national as well as international investments to support their work. They also highlighted weaknesses and contributed to building capacity, supporting networking and opening doors for the beneficiaries. Top entries in the second series of the competitions were published in 2011. Copies of the publication are available from CTA and FARA. You can download a pdf version [here](#). K4D is featuring selected papers in this and upcoming issues.

## Strategic repositioning of agrobiodiversity in the horticultural sector for sustainable development (Keynote paper, finals of the 'Women in Science' competition)

*Professor Abukutsa Mary Oyiela Onyango*

Horticultural biodiversity which was once an integral part of African diets should have been part of the celebrations of the 2010 International Year of Biodiversity. However, with the introduction of exotic temperate crops, indigenous green vegetables lost popularity in Africa and are regarded mostly as 'weeds' or 'poor man's food'. With over 50% of the African population living below the poverty line, resulting in malnutrition and poor health, there is need for a paradigm shift in food production patterns to harness the nutrition and economic potential of indigenous vegetables and fruits. Agrobiodiversity has a crucial part to play in revolutionising the horticultural sector for food security, nutrition, income and sustainable development in Africa. This article outlines strategies and recommendations that could be used to raise the status of agrobiodiversity in the continent.

[Read the article: knowledge.cta.int/en/content/view/full/15092](http://knowledge.cta.int/en/content/view/full/15092)

## Development of Endiisa Decision Support Tool for improved feeding of dairy cattle in Uganda (First prize, 'Women in Science' competition)

*Sarah L. Mubiru, et al.*

Efforts to improve livestock feeding in Uganda have had great strides in identifying nutritious feed resources for cattle. These include pasture grasses and legumes, leguminous shrubs and multipurpose trees, crop residues and agro-industrial by-products. Despite knowledge and the use of appropriate feed resources, milk production of dairy farms has remained low (2 to 5 L per cow per day). The poor performance indicates a gap in dissemination of knowledge to farmers. One major gap identified was that farmers did not know the quantities of feed that would adequately meet the nutritional requirements of their animals. This study demonstrates the use of decision-support tools (DST) in meeting such challenges. It provides information on low status of dairy cattle feeding. In conclusion, the DST that was developed and tested led to improved cattle feeding and increased milk production by 24%. The tool is available on the website of the Uganda National Agricultural Research Organisation (NARO-Uganda), and is recommended for use by farmers, researchers, trainers and policy-makers.

[Read the article: knowledge.cta.int/en/content/view/full/15111](http://knowledge.cta.int/en/content/view/full/15111)

## **Understanding past, present and future climate changes from East to West Africa (Keynote paper, finals of the 'Young Professionals in Science' competition)**

*Aster Gebrekirstos, et al.*

Climate change affects all sectors of society at local, regional and continental scales, but available evidence is not sufficient to guide policies. Unravelling past climatic events is essential if we are to understand the present and to derive reliable scenarios of future climate change. Thus interdisciplinary and international collaborations are needed to extend research frontiers and to develop regional and sub-regional climate models at a scale relevant for decision-makers. Tree rings and stable isotopes in tree rings provide evidence of past climate variability. Given the short instrumental climate records that exist in Africa, dendrochronology adds an essential longer-term perspective on climate change and variability and on the adaptation of agroforestry landscapes and forest ecosystems. Tree-ring analyses were conducted as part of three independently established international research collaborations with different partner institutes in Germany and Africa. Stable carbon and oxygen isotopes in tree rings of *Sclerocarya birrea* from the Sahel region (Burkina Faso) showed strong climatic signals. Tree-ring chronologies spanning more than 100 years are under development for Burkina Faso and Tanzania. The ongoing project in Munessa Forest, Ethiopia may result in chronologies of more than 350 years. Finally, the tree-ring series developed in the three projects will be combined to establish large-scale correlation patterns between tree growth and sea-surface temperatures in order to explore continent-wide climate teleconnections. In order to have representative data sets and draw continent-wide recommendations, however, there is a need to extend the study to other parts of Africa.

[Read the article: knowledge.cta.int/en/content/view/full/15121](http://knowledge.cta.int/en/content/view/full/15121)

## **Prices of raw materials, budgetary earnings and economic growth: A case study of the Côte d'Ivoire (First Prize, 'Young Professionals in Science' competition)**

*Nguiakam Sandrine and Kabore Augustin*

Côte d'Ivoire contributes to global trade through a limited range of products including cocoa, coffee, timber and oil. According to statistics on external trade, these few products have accounted for more than half of the value of exports since the attainment of independence. Like the majority of Sub-Saharan African countries, Côte d'Ivoire is a 'price taker'. For this reason, it does not wield any control over prices of its exports or imports. Furthermore, its exports are quoted in foreign currency and it has no control over the exchange rate, which affects the export earnings quoted in national currency. It therefore seems that Côte d'Ivoire's dependence on raw materials makes the country vulnerable. This study evaluates the impact of the fluctuation of international prices of raw material on the variability of the gross domestic product (GDP) in Côte d'Ivoire. The specific objective was to analyse the Ivorian export structure in order to highlight the importance of raw materials in export earnings; to analyse the coffee and cocoa sectors, the oil sector and stakeholders; to evaluate the influence of price fluctuations on revenue from entry-point taxation; to highlight the impact of the variation of this revenue on Ivorian economic growth. Results illustrate the need for the continuation of efforts aimed at diversifying the economy, and encouraging the setting up of an observatory, in order to predict and weather the various shocks.

[Read the article: knowledge.cta.int/en/content/view/full/15127](http://knowledge.cta.int/en/content/view/full/15127)

[Back To Top](#)

## **CTA S&T Programme Activity Updates**

### **Launch of the 2012 - 2013 Africa-wide 'Women and Young Professionals in Science' competitions**

#### **Call for Abstracts: 'Feeding 1 billion in Africa in a changing world'. Deadline: 14 May 2012.**

[knowledge.cta.int/en/content/view/full/14983](http://knowledge.cta.int/en/content/view/full/14983)

The CTA/FARA/IFS/ANAFE/RUFORUM consortium, in collaboration with AGRA and NPCA, is pleased to announce the launch of its 2012 - 2013 'Women and Young Professionals in Science' competitions. With a population of approximately 1.03 billion in 2011, and a growth rate of 24 million per annum, Africa's population is expected to double by 2050. The continent needs to increase agricultural productivity in a sustainable manner as well as find endogenous solutions to respond to the challenges. Africa's investment in science and innovation remains low, and only one African university is listed among the top 500 in the world. Women are under-represented in all areas of policy, education and research and many of Africa's youthful population; 70% are aged 30 or younger, do not see a future in agriculture or science. The continent faces a knowledge and skills gap as ageing scientists and academicians retire. The 2012 - 2013 Africa-wide competitions will evaluate, recognize and reward the contributions of women and young professionals who are involved in: (i) Pioneering and innovative research; (ii) Communicating their research results and technological developments; and (iii) Advocating for policy change as well as influencing policy processes through their research. They will also raise awareness of the need for valuing and sustaining the engagement of women and young professionals and facilitating their contribution to Africa's socio-economic transformation.

Read the announcements and concept note on the [K4D website](#).

### **Communiqué from the CAADP sensitization conference for French-speaking African universities and agricultural higher education institutions**

[knowledge.cta.int/en/content/view/full/14984](http://knowledge.cta.int/en/content/view/full/14984)

In November 2011, CTA, in collaboration with ANAFE and several partners, hosted a CAADP sensitization conference in Ouagadougou, Burkina Faso for rectors and senior-level officials from French-speaking tertiary agricultural education institutes in Africa. The objectives of the workshop were to: (i) Sensitize leaders of universities and other agricultural higher education institutions and their partners to the CAADP and its processes (ii) Improve the involvement of African universities and agricultural higher education institutions; (iii) Develop a regional action plan to reinforce the involvement of universities and other African agricultural higher education institutions into the CAADP processes; (iv) Define the accompanying

measures to increase the involvement of universities and other French-speaking agricultural higher education institutions. A number of papers including a draft CTA/WUR methodology for engaging universities in CAADP were presented, debated and discussed, and propositions were made. The following were achieved: (i) An increased awareness of the objectives, the constraints and the expected outputs of the CAADP; (ii) A better understanding of the role of universities and other agricultural higher education institutions in cooperation with their supervisory ministries and those in charge of agriculture; (iii) Increased willingness to be involved in the attainment of the CAADP objectives.

[Click here to read the communiqué.](#)

### **Caribbean Young Professionals in Science and Agriculture Video Competition**

[knowledge.cta.int/en/content/view/full/14985](http://knowledge.cta.int/en/content/view/full/14985)

The winning video of the CTA/CCST/CARDI/UWI film and video competition, 'Bee wise' by Vincent Lewis, was a compelling docudrama about using scientific evidence to influence national policy on agro-biodiversity. This presentation demonstrates the potential for engaging with young professionals in getting the message across on complex science and policy issues.

The video can be viewed at [vimeo.com/36006227](https://vimeo.com/36006227).

### **Report of the 2009 Pacific Regional Universities Workshop 'Science for impact - Building critical mass'**

[knowledge.cta.int/en/content/view/full/14986](http://knowledge.cta.int/en/content/view/full/14986)

CTA has released the report of the 2009 CTA/UNRE/USP regional workshop which aimed to contribute to the building of a cadre of scientists well connected to other stakeholders and able to advance teaching, research and innovation processes for sustainable economic development through agriculture and the utilization of renewable natural resources. The workshop provided an opportunity for Pacific universities to network and created greater awareness on the critical role that research, innovation and entrepreneurship can play in enhancing the contribution of knowledge for improving the performance of the agricultural sector and to sustainable socio-economic development.

The main issues discussed included: (i) International and regional reports on status of agriculture, higher education, research and training and the role of knowledge, science, technology and innovation; (ii) Success stories and new programme initiatives such as the Vudal and USP experiences that respond to the challenges and priority needs of the agricultural stakeholders in the region; (iii) New modalities for research and innovation partnerships, teaching and learning including the development of web-based techniques for learning, interaction and inter-institutional cooperation so that education is relevant to the changing needs of the 21st century; (iv) New funding mechanisms, modalities for achieving synergy and economies of scale. The report also carries links to presentations given during the workshop.

These presentations can also be downloaded at [www.slideshare.net/Knowledge4Development](http://www.slideshare.net/Knowledge4Development).

[Back To Top](#)

## **Developments | RSS**

### **EIB, Caribbean Development Bank launch climate action lending programme**

[knowledge.cta.int/en/content/view/full/15073](http://knowledge.cta.int/en/content/view/full/15073)

The European Investment Bank (EIB) and the Caribbean Development Bank (CDB) agreed on the [details](#) of a US\$65 million dedicated Climate Action lending and technical assistance programme to be funded by the EIB. The new lending programme will provide long-term, low-cost funding for public and private sector climate change mitigation or adaptation projects.

Projects eligible for funding under the new programme include adaptation, renewable energy, sustainable transport, forestry and land use, and low-carbon technology research, development and innovation. The 18 countries that can benefit from the lending programme are: Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, and the Turks and Caicos Islands.

### **Bank boosts S&T learning in tertiary education**

[knowledge.cta.int/en/content/view/full/15076](http://knowledge.cta.int/en/content/view/full/15076)

The African Development Bank has launched a project to assist in revamping science and technology learning at seven tertiary institutions in Malawi, focusing on increasing access, quality and relevance. The goal of expanding higher education should come as a relief to Malawians. Three universities and four polytechnics, plus vocational training centres, will be the beneficiaries of the Higher Education, Science and Technology project. It will also include technical, entrepreneurial and vocational education and training (TEVET).

([University World News](#), 18/02/2012)

### **New soil carbon methodology gets international approval**

[knowledge.cta.int/en/content/view/full/15080](http://knowledge.cta.int/en/content/view/full/15080)

Farmers in western Kenya experience the dire effects of climate change, through drought and the decline of soil fertility which seriously threaten their livelihoods. A methodology and approach on soil carbon, for sustainable agricultural land management (SALM) practices approved by Verified Carbon Standard and developed by the World Bank for the Smallholder Agriculture Carbon Finance project run by the non-governmental organisation Vi Agroforestry in western Kenya has been recognised internationally. The methodology encourages smallholder farmers in Kenya - and potentially worldwide - to adopt improved farming techniques, boost productivity, increase their resilience to climate change, and earn carbon credits. The pilot, involving more than 60,000 smallholders who are farming 45,000 hectares of land, is run together with smallholder farmers and supported by the World Bank's BioCarbon Fund.

([Worldbank](#), 30/01/2012)

## Screening Africa's renewable energies potential

[knowledge.cta.int/en/content/view/full/15083](http://knowledge.cta.int/en/content/view/full/15083)

The European Commission's Joint Research Centre (JRC) published a study mapping the potential of renewable energy sources in Africa. The report analysed the current energy consumption in Africa and assesses potential of renewable energy sources - solar, wind, biomass and hydropower - and their cost efficiency and environmental sustainability. This publication coincided with the official European launch of the UN's year on 'Sustainable Energy for All'. The map of Africa's solar electricity potential, based-on the JRC's Photovoltaic Geographical Information System (PVGIS), showed that in many parts of Africa the same photovoltaic panel could produce twice the electricity as it would produce in central Europe. However, in order to assess the suitability of solar energy to provide electricity in rural areas, this option has to be assessed against costs for grid extensions and with the traditional diesel generators. A combined analysis of photovoltaic systems, grid extensions and diesel options shows which option is the most cost efficient for each area.

([Physoorg](#), 14/02/2012)

## Apps4Africa Climate Challenge sees youthful innovation

[knowledge.cta.int/en/content/view/full/15086](http://knowledge.cta.int/en/content/view/full/15086)

Rural farming communities and those whose livelihoods are directly impacted by climate change can benefit greatly from better use of ICTs in alleviating poverty and finding ways to farm sustainably. In this regard, developers and entrepreneurs across the Continent have been working on mobile and computer-based systems which would help tackle climate change in creative ways. This creativity was rewarded by the US Department of State's Bureau of African Affairs in the Apps4Africa Climate Challenge. Announced in January 2012, the first place in the challenge went to 'The Grainy Bunch' app, made by 29-year-old Eric Mutta of Tanzania. The Grainy Bunch is a national (Tanzania) grain supply chain management system that monitors the purchase, storage, distribution, and consumption of grain across the entire nation. It was developed with the understanding that selling 'the effects of efficiency' to actors in the grain supply chain is much easier than selling 'the effects of climate change'.

([eLearning Africa](#), 01/2012)

## Breakthrough in GMO maize research excites ASARECA General Assembly

[knowledge.cta.int/en/content/view/full/15089](http://knowledge.cta.int/en/content/view/full/15089)

At the General Assembly of the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), Executive Director Dr Seyfu Ketema announced the successful production of transgenic maize seeds with a construct of a gene scientifically coded as PNOV-ASARAnxzm35. The gene, also known as the ASARECA gene, was isolated from the maize egg cell. Plants with this genes show more resistance to water deficit. They are capable of returning to full recovery after drying up. Nine maize lines have been successfully transformed by incorporating them with genes that give plants the capacity to resist drought. The research was conducted by scientist in eastern and central Africa and led by Professor Jesse Machuka of Kenyatta University, Kenya. The nine maize lines are being multiplied in a screen house at Kenyatta University in preparation for confined field trials.

([ASARECA](#), 18/01/2012)

[Back To Top](#)

## Selected publications | [RSS](#)

### Women's empowerment in agriculture index

[knowledge.cta.int/en/content/view/full/14981](http://knowledge.cta.int/en/content/view/full/14981)

Women play a critical and potentially transformative role in agricultural growth in developing countries, but they face persistent obstacles and economic constraints limiting further inclusion in agriculture. The [Index](#) is a significant innovation in its field and aims to increase understanding of the connections between women's empowerment, food security, and agricultural growth. It measures the roles and extent of women's engagement in the agriculture sector in five domains: (i) Decisions about agricultural production; (ii) Access to and decision making power over productive resources; (iii) Control over use of income; (iv) Leadership in the community; and (v) Time use. It also measures women's empowerment relative to men within their households. It allows us to identify women who are disempowered and understand how to increase autonomy and decision making in key domains. shows how a systems approach can be used to create systems and settlements that provide food, energy and water without consuming large quantities of fossil fuels and other finite resources.

### Vulnerability of tropical Pacific fisheries and aquaculture to climate change

[knowledge.cta.int/en/content/view/full/15093](http://knowledge.cta.int/en/content/view/full/15093)

The Secretariat of the Pacific Community (SPC) has [released an e-book](#) analysing the vulnerability of Pacific fisheries to climate change which includes contributions from 88 international scientists and fisheries specialists. The book was launched on the sidelines of the seventh Conference of the Pacific Community, which convened from 7 - 8 November 2011, in Noumea, New Caledonia. It predicts that ocean acidification and loss of important habitats, such as coral reefs, seagrass beds, mangroves and intertidal flats, will dramatically decrease the fish and shellfish that support many coastal communities. Communities are instead predicted to become more reliant on rich tuna resources. Freshwater fisheries are predicted to be 'winners' with the book outlining expected improvements in freshwater pond aquaculture. However, the publication notes that improved aquaculture will not be able to feed the rapidly increasing population.



## **Climate science, information, and services in Africa: Status, gaps and policy implications**

[knowledge.cta.int/en/content/view/full/15096](http://knowledge.cta.int/en/content/view/full/15096)

UN Economic Commission for Africa, African Climate Policy Centre, Working Paper No.1. November 2011.

[This paper](#) is the result of African Climate Policy Center (ACPC) of the United Nations Economic Commission for Africa (UNECA) under the Climate for Development in Africa (ClimDev Africa) programme. This paper provides an assessment of the current state of climate science, data and information in Africa and its use in development activities. It identifies key gaps and recommends actions needed to be taken for bridging the gaps. Noted gaps include the lack of provision and use of climate information and services and proposed solutions see more meteorologists being trained and better equipped weather stations.

## **Climate change and agriculture in Africa - Analysis of knowledge gaps and needs**

[knowledge.cta.int/en/content/view/full/15099](http://knowledge.cta.int/en/content/view/full/15099)

UN Economic Commission for Africa, African Climate Policy Centre, Working Paper No.7. November 2011.

[This paper](#) assesses the vulnerability of the agricultural sector in Africa to the short term climate variability and long term effects of climate change. The nexus between agricultural policy and research and development in climate variability and climate change is also explored to identify existing knowledge gaps that prevent agricultural policy development from integrating climate variability and climate change information. The study concludes by making some recommendations vis-à-vis the role of African agriculture in international climate change negotiations.

## **Biofuels: review of policies and impacts**

[knowledge.cta.int/en/content/view/full/15105](http://knowledge.cta.int/en/content/view/full/15105)

University of California, Berkeley, Department of Agricultural and Resource Economics, CUDARE Working Papers No. 1119.

[This paper](#) provides an overview of the environmental, economical, and policy considerations related to biofuels. While the biofuel production and consumption exhibited significant increase over the first decade of the new millennium, this and further increases in biofuel production are driven primarily by government policies. Currently available first generation biofuels are with a few exceptions not economically viable in the absence of fiscal incentives or high oil prices. Also the environmental impacts of biofuels as an alternative to fossil fuels are quite ambiguous. The review of the most recent economic models dealing with biofuels and their economic impacts provides a distinction between structural and reduced form models. The review of reduced models is structured toward the time series analysis approach to the dependencies between prices of feedstock, biofuels, and fossil fuels.

## **Research investments and market structure in the food processing, agricultural input and biofuel industries worldwide**

[knowledge.cta.int/en/content/view/full/15108](http://knowledge.cta.int/en/content/view/full/15108)

K. Fuglie, et al. USDA Economic Research Report No. 147. 12/2011.

Meeting growing global demand for food, fibre and biofuel requires robust investment in agricultural research and development (R&D) from both public and private sectors. [This study](#) examines global R&D spending by private industry in seven agricultural input sectors, food manufacturing, and biofuel and describes the changing structure of these industries. In 2007 (the latest year for which comprehensive estimates are available), the private sector spent \$19.7 billion on food and agricultural research (56 percent in food manufacturing and 44 percent in agricultural input sectors) and accounted for about half of total public and private spending on food and agricultural R&D in high-income countries. In R&D related to biofuel, annual private-sector investments are estimated to have reached \$1.47 billion worldwide by 2009. Incentives to invest in R&D are influenced by market structure and other factors. Agricultural input industries have undergone significant structural change over the past two decades, with industry concentration on the rise. A relatively small number of large, multinational firms with global R&D and marketing networks account for most R&D in each input industry. Rising market concentration has not generally been associated with increased R&D investment as a percentage of industry sales.

## **Bridging the gap on intellectual property and genetic resources (WIPO)**

[knowledge.cta.int/en/content/view/full/15113](http://knowledge.cta.int/en/content/view/full/15113)

David Vivas-Eugui. ICTSD Issue Paper No. 34. January 2012.

Discussions on how to address concerns about the misappropriation of genetic resources and traditional knowledge have been high on the agenda of a variety of multilateral forums such as the Convention on Biological Diversity (CBD) the World Trade Organization (WTO) and the World Intellectual Property Organization (WIPO). In the past two years, WIPO's Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) has witnessed an acceleration of its work in particular on traditional knowledge and traditional cultural expressions. However, the gap in positions on genetic resources remains significant. Against this background, [this issue paper](#) examines at length the range of measures and options discussed in the IGC especially biodiversity disclosure requirements and databases. It also considers the binding or non-binding nature of the instrument(s) that might emerge from the IGC and their different implications. In connection to all these aspects, the paper makes recommendations regarding processes, substance and existing research gaps that could contribute towards advancing the IGC's deliberations.

## **Impacts of an improved seed policy environment in Eastern and Central Africa**

[knowledge.cta.int/en/content/view/full/15119](http://knowledge.cta.int/en/content/view/full/15119)

This [discussion paper](#) assesses the impacts of an improved seed policy environment in the Eastern and Central Africa (ECA) region using a case study of formal trade in seed maize in Kenya, Uganda and Tanzania that employs a spatial equilibrium model (SEM). The paper commences by reviewing the progress made in the harmonization of seed policies in ECA region

with regard to five thematic areas agreed for harmonization namely: (i) facilitation, building and empowering of public-private partnerships; (ii) observation of the importance and differences amongst technical, political and legislative stages in the process of reform; (iii) dialogue at two levels: national and regional; (iv) nurturing transparency, institutional cooperation and multi-disciplinarity; (v) differentiation between administrative/procedural and legislative issues in discussions and consensus building. The results of the welfare analysis give compelling evidence in support of an improved seed policy environment. While improved policy environment requires in contributions from many players and actors, it is assumed that harmonization of policies, laws and regulations is a critical addition to this process.

### **Crop post harvest science and technology: Perishables**

[knowledge.cta.int/en/content/view/full/15125](http://knowledge.cta.int/en/content/view/full/15125)

The Natural Resources Institute (UK) has compiled a book on *Crop Post-Harvest Science and Technology: Perishables*. Researchers and upper-level students in food science, food technology, post-harvest science and technology, crop protection, applied biology and plant and agricultural sciences will benefit from having this book in their research establishments and universities. [This volume](#) devotes itself to perishable produce, providing current and comprehensive knowledge on all the key factors affecting post-harvest quality of fruits and vegetables. It focuses explicitly on the effects and causes of deterioration, as well as the many techniques and practices implemented to maintain quality through correct handling and storage. This book follows on from two earlier publications books edited by NRI staff: *Crop Post Harvest Science and Technology: Principles and Practice* and *Crop Post Harvest Science and Technology: Durables*.

### **Mapping and foresight of agricultural and food research capacity in Europe (Final Report)**

[knowledge.cta.int/en/content/view/full/15128](http://knowledge.cta.int/en/content/view/full/15128)

This is the [final report](#) for the EU-AGRI MAPPING (Mapping and foresight of agricultural and food research capacity in the new member states and in the candidate countries) project. The report presents the results of a study and provides an overview of the research landscape from the perspective of organisation and activities. The objective is to provide the European Commission with a synthesis of the research systems and the trends in research activities. This report is concise as it provides the major conclusions as well as a review for each country. It is supported by the country reports and country summaries as well as by the survey in the EU-14 and the bibliometric analysis in the 33 countries covered by the project.

### **Growing knowledge: Access to research in eastern and southern African universities**

[knowledge.cta.int/en/content/view/full/15130](http://knowledge.cta.int/en/content/view/full/15130)

The Association of Commonwealth Universities (ACU) Papers. Policy and Research Unit. 06/2011.

Researchers in Sub-Saharan Africa commonly highlight poor journal access as a serious hindrance to their academic work. But thanks to partnerships between librarians, publishers and a number of access initiatives, academics and students in east and southern Africa - and across the wider continent - have an impressive range of high-quality peer-reviewed material available. While availability and electronic access is improving dramatically in many universities, actual usage amongst staff and students does not appear to be keeping pace. [This study](#) explores a series of interrelated issues which help to explain why availability has not yet translated into high levels of access and use in some cases: technology and connectivity, the discovery of academic resources, library leadership and staff development, and relationships within the university. It offers a series of recommendations for librarians, ICT staff, university managers and external support and funding organisations, suggesting practical ways in which they can help to strengthen research and teaching by encouraging greater use of available online resources.

### **RUFORUM Newsletter: Special focus on SCARDA (Strengthening Capacity for Agricultural Research in Africa)**

[knowledge.cta.int/en/content/view/full/15132](http://knowledge.cta.int/en/content/view/full/15132)

The [November 2011](#) edition of the RUFORUM newsletter features SCARDA (Strengthening Capacity in Agricultural Research and Development in Africa) case studies and commentaries. The SCARDA project aimed to enhance the performance of selected research and educational organisations in ten countries. Particular emphasis was placed on strengthening linkages between these organizations and their research partners to help foster agricultural innovation. One of the major components of the project was strengthening the quality of science in the target organisations and support for postgraduate studentships in priority topics was the key activity in this.

### **NRI - More support for capacity-strengthening is needed**

[knowledge.cta.int/en/content/view/full/15135](http://knowledge.cta.int/en/content/view/full/15135)

In February 2012, Professor Andrew Westby, Director of the NRI, presented evidence to the UK House of Commons Science and Technology Committee, as part of its Inquiry on Science and International Development. Professor Westby said that successful capacity development initiatives should be long-term, locally-owned, and carefully-focused and nuanced. The SCARDA project was highlighted by the inquiry for its innovation in building on existing research structures in Africa, being demand-led and achieving significant impact. ([NRI](#), 07/02/2012)

### **RUFORUM Newsletter: Special focus on SCAIN (Strengthening Capacity for Agricultural Innovation)**

[knowledge.cta.int/en/content/view/full/15136](http://knowledge.cta.int/en/content/view/full/15136)

The testimonies of the students who graduated through the SCAIN programme, some of which are featured in the RUFORUM [December 2011](#) special issue, show how much they valued the wide range of training activities that was provided. This went far beyond the standard curricula of the universities and included workshops on personal mastery and soft skills, scientific data

management and writing proposals and technical papers. Outputs from both SCARDA and SCAIN are also available on an electronic platform hosted on the RUFORUM website

### **EIARD Policy Brief: Capacity development for agricultural research for development**

[knowledge.cta.int/en/content/view/full/15139](http://knowledge.cta.int/en/content/view/full/15139)

This [January 2012](#) paper discusses issues related to support for capacity strengthening for agricultural research for development (ARD) by member countries of the European Initiative for Agricultural Research for Development (EIARD). It summarises the findings of an analysis of the policies, programmes and projects in capacity strengthening for ARD of fourteen European countries. These policies, programmes and projects were previously examined in relation to a common set of criteria covering aspects of needs identification, design, implementation, assessment, documentation and sharing of information. The findings are discussed in the context of emerging opportunities and challenges for capacity development for ARD and recommendations are made for improvements in the way that support is provided. Some key message: (i) Increasing support to capacity development for ARD is needed if the investment in ARD are to generate sustainable returns; (ii) Capacity strengthening initiatives should have a stronger focus on organizational and institutional strengthening as opposed to individual training; (iii) Multi-stakeholder initiatives should be encouraged as they are likely to lead to larger impacts than those targeted exclusively towards research organizations and institutes of higher education.

### **EIARD Analysis of donor support to CAADP Pillar 4 Phase 2**

[knowledge.cta.int/en/content/view/full/15141](http://knowledge.cta.int/en/content/view/full/15141)

EIARD commissioned a study (Phases 1 and 2) to provide the European Initiative for Agricultural Research for Development (EIARD) with the knowledge and processes required to better coordinate and harmonise support to CAADP Pillar 4 both between EIARD members, and between EIARD members and other donors. The [Phase 2](#) report presents the outputs of three country case studies in Benin, Tanzania and Zambia. Despite the data limitations, the results suggest that (i) there are still many issues over coordination, harmonisation and alignment of donor support; (ii) national systems are underfunded and understaffed and have imperfectly absorbed demand-led models resulting in a lack of strategic direction; and (iii) competitive grant funding, and the regionalisation of funds, may have tended to create supply-driven competition in which international and regional providers are better able to compete than national organisations.

[Back To Top](#)

## **Events | [RSS](#)**

### **Third West and Central Africa Agricultural Science Week and 10th General Assembly of CORAF/WECARD**

[knowledge.cta.int/en/content/view/full/14950](http://knowledge.cta.int/en/content/view/full/14950)

Dates: 14-19 May 2012

Venue: N'djamena, Chad

The West and Central African Council for Agricultural Research and Development (CORAF/WECARD), in collaboration with its partners, is holding its Third West and Central Africa Agricultural Science Week (3rd WCA-ASW) and 10th General Assembly in N'djamena, Chad, in May 2012. The main theme chosen for the 3rd WCA-ASW is: 'Strengthening the adaptive capacity of rural poor populations to climate change and variability in West and Central Africa'. This theme will be dealt with in the prospect of improving productivity, competitiveness and agricultural markets in order to reduce poverty and food insecurity in West and Central Africa. The objective of the third WCA-ASW is to raise awareness of the Scientific Community for Agricultural Development, on the constraints related to climate change and variability and on options that can enable rural poor populations to adapt to them.

### **Summer School 2012: 'The new dimensions of sectoral systems of innovation', Research Network on Innovation**

[knowledge.cta.int/en/content/view/full/14955](http://knowledge.cta.int/en/content/view/full/14955)

Dates: 29 August 2012 - 1 September 2012

Venue: Montpellier, France

Call for Papers deadline: 15 May 2012 ([rien.univ-littoral.fr/wp-content/uploads/2012/01/call-for-papers.pdf](http://rien.univ-littoral.fr/wp-content/uploads/2012/01/call-for-papers.pdf))

This Summer School meets the Research Network on Innovation (RNI)'s ambition to update on the works considering the sectoral dimensions of innovation, or using and questioning the concept of Sectoral System of Innovation (SSI). This initiative also proceeds from the perspectives open by the international symposium held in 2010 in Montpellier on innovation in agriculture and agri-food ([www.isda.net](http://www.isda.net)), calling for comparative analyses with research on innovation in other sectors. The aim is to question specificities and convergences of innovations in different sectors, and to discuss the relevancy of the concept of Sectoral Systems of Innovation (SSI).

[Back To Top](#)

## **Grants, Competitions and Calls | [RSS](#)**

### **Call for proposals: Canada Fund for African Climate Resilience**

[knowledge.cta.int/en/content/view/full/14962](http://knowledge.cta.int/en/content/view/full/14962)

Deadline: 19 April 2012

The Fund will co-finance Canadian organizations or coalitions to address climate change effects and adaptation needs that restrict or have negative impacts on food security and/or economic growth in Africa. The focus countries are Ethiopia, Ghana, Mali, Mozambique, Senegal, and Tanzania. Projects in certain other Sub-Saharan countries are also eligible (Burkina Faso, Cameroon, Dem Rep Congo, Kenya, Nigeria, Rwanda, South Africa, and Zambia).

## **Masters and PhD Scholarship in Agriculture for African Countries (Australian Government Scholarships)**

[knowledge.cta.int/en/content/view/full/14956](http://knowledge.cta.int/en/content/view/full/14956)

Deadline for submission: 30 April 2012

Candidates directly associated with agricultural research and development efforts supported by one or more of the three Australia-Africa Agricultural Partnerships being funded under the Australian Food Security Program in Africa (ACIAR-CIMMYT; CSIRO-CORAF; and CSIRO-Beca) are encouraged to apply. Eligible nationals of the following countries may apply: Benin, Burkina Faso, Burundi, Cameroon, Chad, Egypt, Ethiopia, Ghana, Kenya, Liberia, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Tanzania, The Gambia and Uganda.

## **Call for applications: CODESRIA 2012 small grant programme for thesis writing**

[knowledge.cta.int/en/content/view/full/14961](http://knowledge.cta.int/en/content/view/full/14961)

Deadline: 15 June 2012

The Council for the Development of Social Science Research in Africa (CODESRIA) is pleased to announce its Small Grants Programme for Thesis Writing for the year 2012. The grants serve as part of the Council's contribution to the development of the social sciences in Africa, and the continuous renewal and strengthening of research capacities in African universities, through the funding of primary research conducted by postgraduate students and professionals. The CODESRIA Small Grants Programme is open to graduate students and professionals currently registered in African universities, and preparing their theses and dissertations in all social science fields and other disciplines involving social or economic analysis. Preference is given to those registered for doctoral studies (PhD or equivalent), though few grants are available for Masters Theses.

[Back To Top](#)

## **Jobs | RSS**

### **Deputy Director General, Research, IITA, Ibadan, Nigeria**

[knowledge.cta.int/en/content/view/full/15058](http://knowledge.cta.int/en/content/view/full/15058)

Deadline: until filled.

The DDG-Research will be expected to develop research strategies that will support the achievement of development results, a process better known in the institution as Research for Development, and ensure appropriate implementation of those strategies. S/he will ensure that IITA's work not only enlarges global understanding of the problems and potentials faced by Africa's poor farmers, but also results in better-nourished consumers, more profitable smallholder farm operations, and a more competitive and sustainable agricultural sector. The DDG-Research will work closely with IITA's Director General to reach out to potential funders and partners who share IITA's commitment to research that nourishes Africa.

[Back To Top](#)

## **Organisations | [More organisations on our website](#)**

### **Access to Research for Development and Innovation (ARDI)**

[knowledge.cta.int/en/content/view/full/14963](http://knowledge.cta.int/en/content/view/full/14963)

The [Access to Research for Development and Innovation](#) (ARDI) programme is coordinated by the World Intellectual Property Organization together with its partners in the publishing industry with the aim to increase the availability of scientific and technical information in developing countries. By improving access to scholarly literature from diverse fields of science and technology, the ARDI programme seeks to: (i) reinforce the capacity of developing countries to participate in the global knowledge economy; and (ii) support researchers in developing countries in creating and developing new solutions to technical challenges faced on a local and global level. Currently, 12 publishers provide access to over 200 journals for 107 developing countries through the ARDI programme.

[Back To Top](#)

---

To unsubscribe, send a blank email to [leave-knowledge-en@lists.cta.int](mailto: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 [join-knowledge-en@lists.cta.int](mailto:join-knowledge-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.