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April 2013 newsletter

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New feature articles

CTA REPORTS: *ADDING VALUE TO LOCAL FOODS FOR FOOD AND NUTRITION SECURITY: MYTH OR STRATEGIC OPTION*

The Role and Impact of State Marketing Boards and Agencies

By Ian Ivey, NEXT Corporation



This [CTA commissioned report](#) reviews the impacts that state marketing boards and agencies have had on the agricultural sector. The broad findings are that state boards and agencies are generally operating within a set of traditional parameters and are required to respond to often quite different commercial, regulatory and policy agendas at the same time. These agendas are to a large extent no longer relevant in the 21st century, and often lead to confusion in achieving the desired outcomes. In addition, such entities tend to be 'followers' rather than 'leaders' and innovators. Their contribution to creating value and improving food and nutrition security in the region has not been significant and the Caribbean has become a net importer of food.

Some state boards and agencies have sometimes made quite useful contributions but these have not been delivered in a holistic, integrated context, nationally and internationally. In addition, some activities have tended to have negative consequences for private entrepreneurs; e.g. within local markets, where both are competing to supply the same buyers; or in hindering export development, through their powers to control the aggregation and sale of basic commodities, such as cocoa and sugar, to offshore buyers.

The paper presents eight case studies that describe how private entrepreneurs in the region have achieved success by establishing comprehensive, market-driven value chains that operate efficiently and effectively, both within Caribbean countries and internationally. Using a qualitatively-based scorecard, based around 10 key success factors that the author considers are really a measure of the level of innovation that an entrepreneur has demonstrated, he uses the eight case studies to illustrate where commonalities lie in achieving success. Such entrepreneurs provide a leading-edge view of what could be achieved by the agricultural sector by exploiting the things the Caribbean region can do best rather than trying to continue to be commodity producers and traders.

The 10 key success factors which reflect innovation components are: funding/scaling up, value chains, science and technology, value added, novel uses, sustainable, cooperation, branding, marketing and exporting. In six out of the eight cases S&T received a score of 9 out of 10. In the other two cases S&T received a score of 8 and 10 respectively. In the author's view, most of these 10 success factors are not being accorded the attention that they should be given by the majority of those involved in supporting the development of the agricultural sector, particularly at the state level.

Roadmap for the foundation of a sustainable cassava industry in Jamaica

By Chadwick Anderson, PhD, project consultant



The *Cassava Value Chain Roadmap* was developed from the proceedings of a national workshop which was held as an off shoot of the regional workshop *Adding value to local foods for food and nutrition security: myth or strategic option – Leveraging the research, innovation and entrepreneurship network*, 26-29 November 2012. Industry experts, researchers and practitioners delivered key presentations on various aspects of the industry. Gaps, and proposed solutions or options were identified for moving the industry forward. The four main

presentations are summarized as follows:

- The Caribbean Agricultural Research and Development Institute (CARDI) currently has an active cassava research programme. Mr Black of CARDI underscored that cassava farmers in Jamaica are competing with farmers across the globe, and there is need to develop cooperatives to utilise modern high technology systems-based approaches.
- Jamaica could produce 63,700 tonnes of fresh cassava annually, on twenty large farms (totaling 4862 ha), and utilising mechanised/semi-continuous technology for production and processing. Under such a scenario, Jamaica could substitute wheat with cassava flour at the same price point according to Dr Ian Thompson, University of the West Indies, Mona Campus.
- Red Stripe, the leading manufacturer of beer, is seeking to use 40% locally-sourced raw materials (cassava) by 2016. Mr Healey, Operations Manager at Red Stripe, indicated that in an integrated production system, the company is prepared to pay in the region of US \$35/tonne for cassava and that price point could be accomplished with yields of 60 tonnes per hectare. He expressed concern regarding the current level of toxicity and noted that, ideally, a cyanide-free variety of cassava would be needed by Red Stripe.
- A cultural challenge persists in increasing cassava consumption and this must be recognised and addressed in order to have a successful cassava industry that responds to consumer demands. Dr Deslandes, UWI and consultant to the Ministry of Agriculture and Fisheries, highlighted that any future attempts must include significant focus on R&D.

The main areas identified for action, moving forward are: (i) the development and execution of a government-supported policy which supports cassava as a recommended starch/staple food in Jamaica's food and nutrition security programme; (ii) the development of database(s) for: varieties suitable for processing, to support the value-added thrust; the preferred/recommended cassava planting areas in Jamaica; and the best production practices, to obtain the highest yields; (iii) research and development programme for new varieties with low cyanide content, yield optimisation and value-added products; (iv) the creation of an accessible database showing options for value-added cassava products for local and export markets; (v) the organisation of a functional cooperative of cassava farmers; (vi) the creation of an Association of Cassava Processors; (vii) the development of a cost-effective communication and marketing programme to support the cultural change towards greater local consumption of cassava; and (viii) access to funding.

CTA as partner – EU FP 7 CAAST-Net Plus project

CTA is a member of a consortium of 25 partners involved in the EU 7th Framework Programme CAAST-Net Plus project '*Advancing SSA-EU cooperation in research and innovation for global challenges*'. The project focuses on food security, climate change and health. In collaboration with several partners, CTA is working on the food security global challenge. Their first task is the '*Analysis of the impact of research cooperation on food security between Europe and Sub-Saharan Africa*'. CTA and partners are expected determine to what extent research cooperation in food security supported by the EU's framework programme, bilateral MS programmes and by private research funds has impacted on joint food security priorities. The outcomes will provide a knowledge base for the elaboration of a food security platform to address Europe-Africa joint food security priorities. The climate change and health teams are undertaking similar tasks.

The CAAST-Net project is coordinated by the Association of Commonwealth Universities, UK and the kick off meeting for the project was held in Brussels in February 2013. The first annual project meeting is planned for June in Addis Ababa, Ethiopia.

Visit www.caast-net-plus.org/.

6th Africa Science Week and FARA General Assembly Side Event: Programme for Finals of 3rd Africa-wide Science competitions

The programme for the Finals of the 3rd CTA/FARA/IFS/ANAFE/NPCA/RUFORUM/AGRA Africa-wide Women and Young Professionals in Science competitions is available.

20 finalists; 10 for each category, will compete for the top five places in each competition on 15 - 16 July 2013 during the two-day Side Event which is an integral part of the 6th Africa Science Week and FARA General Assembly, 15 – 20 July 2013, in Accra, Ghana. The winners will be announced during the FARA General Assembly.

The judges are: Prof. Ameenah Gurib-Fakim, Managing Director, CEPHYR, Mauritius (Chief judge); Ms Marjorie Niyitegeka Kyomuhendo, PR & Strategic Communication Specialist, Makerere University, Uganda; Dr Demba Farba Mbaye, Virginia Tech University, USAID/ERA project, Dakar, Senegal; Prof. Robert Kariuki Obura, Deputy Principal (A&R), Laikipia University College, Kenya and Prof. Abdoulaye Gouro, Executive Secretary, Conseil national de la recherche agronomique du Niger (Niamey, Niger). Key note speakers are Professor Agnes Mwang'ombe, Principal, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya (Women) and Dr Graham Haylor, Director, International Foundation for Science (IFS) Sweden (Young Professionals).

The prizes for the **Women in Science** are: 1st Prize – Trophy, laptop and \$5,000 cash, books; 2nd prize – laptop and \$3,000 cash, books; 3rd prize – laptop and \$2,500 cash, books; 4th and 5th places - \$1,500 cash each, books.

The prizes for the **Young Professionals in Science** are: 1st Prize – Trophy, laptop and \$3,000 cash, books; 2nd Prize – video camera and \$2,000 cash, books; 3rd Prize – digital camera and \$1,500 cash, books; 4th & 5th places - \$1,000 each, books. Special prizes will be announced.

[Click to download the programme.](#)

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Selected developments and publications | [RSS](#)

Are we losing sight of the true value of research 'impact'?

knowledge.cta.int/en/content/view/full/18116

Andrew Clappison tracks the impact of public-goods research related to international development. Relating the debates from the Future of Impact Conference (UK Higher Ed), he senses the risk of bureaucratising institutional approaches to the Research Excellence Framework that could stall innovation.

([Research to Action](#), 11/04/2013)

Agricultural Data Interest Group founded within Research Data Alliance

knowledge.cta.int/en/content/view/full/18114

The group's task is daunting: it must tackle the problem of interoperability of different data types on each of the major crops (germplasm data, genetic and phenotype data, statistical data, text).

([Voagr](#), 12/04/2013)

Guidelines: access and benefit sharing in research projects

knowledge.cta.int/en/content/view/full/18111

These guidelines describe the type of agreements that can be used in access and benefit sharing in research projects. Their primary audience are scientists working with crop genetic resources and related traditional knowledge in research organisations. They can also be useful for authorities involved in legislative processes on the matter and for local populations who participate in research and development projects dealing with the conservation and use of agricultural biodiversity. This publication is based on the experience gained during the implementation of the project 'In situ/On farm Conservation and Use of Agricultural Biodiversity (Horticultural Crops and Wild Fruit Species) in Central Asia'.

([Agrobiodiversity Platform](#), 12/4/2013)

Factors affecting access to and protection of aquaculture genetic resources

knowledge.cta.int/en/content/view/full/18107

Actors in the aquaculture sector face emerging difficulties pertaining to affordable access to improved breeding material and technology, while also securing adequate funding for sustainable breeding programmes. Public ownership or support seems to be important measures to balance these objectives. This is particularly the case during the early phases of implementation and operation of applied aquaculture breeding programs. This study thus investigates how actors in the sector access aquatic genetic material and protect innovations in breeding. It analyses how corporate strategies, technological developments, and international regulatory regimes affect these options.

([FNI](#), 03/2013)

Opportunities and limitations for functional agrobiodiversity (FAB) in the European context

knowledge.cta.int/en/content/view/full/18104

Planned reforms in European agricultural policy could facilitate the implementation of functional agrobiodiversity (FAB) concepts in the sector. However, impediments to the adoption of FAB approaches still exist, mainly (i) translation of general knowledge to tailored, ready-to-use management practices, (ii) limited information on the effectiveness of FAB measures in terms of crop yield and quality, profitability, and reduction of agrochemical inputs, (iii) lack of appropriate financial accounting systems that allow fair accounting of the private investments and public benefits, and (iv) the implementation of FAB measures at the right spatial scales, which requires coordination among the various actors in a region. This paper explores the current and new legislation that may provide incentives to address these limitations.

([via ELN-FAB Newsletter](#), April 2013)

Agro-ecosystems: reservoirs of biodiversity to be promoted

knowledge.cta.int/en/content/view/full/18102

Biodiversity conservation policy and scientific choices made over the past 20 years have led to the development of global assessments, and management and conservation tools for living organisms. Such standardisation of environmental policies and instruments tends to marginalise cultivated tropical ecosystems and their related practices. A multi-disciplinary team of researchers demonstrate how the standardisation of conservation methods has led to a decline in species diversity and local knowledge in agricultural landscapes. Because they are reservoirs of biodiversity in their own way, agro-ecosystems should be better understood and protected.

([IRD](#), 02/2013)

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Population boom poses interconnected challenges of energy, food, water

knowledge.cta.int/en/content/view/full/18099

Speakers at 'The Interconnected World of Energy, Food and Water' international symposium called for innovations in plant biotechnology, synthetic biology and information technology to address the challenges of a growing world population. The discussion aimed at fostering greater awareness among scientists, the public and policy-makers about the interconnections between the three challenges. Regarding regulatory policies for example, there is a pressing need to keep pace with technology development and deployment, and to build science-based risk assessment capability and consumer confidence.

(via [EurekAlert](#), 8/04/2013)

A review of global scenario exercises for food security analysis: assumptions and results

knowledge.cta.int/en/content/view/full/18095

This study reviews nine major global food security scenario in the literature, published between 2000 and 2012. Four out of the nine studies focus explicitly on agriculture and the food system. Four others have a broader or different perspective (e.g. climate change, environment and ecosystems) but include elements relevant for food security analysis. The study finds that all of the scenarios only deal with two of the four dimensions of food security: food availability and food accessibility, while food utilisation and stability are hardly covered.

([FoodSecure.eu](#) and [LEI Wageningen UR](#), 14/02/2013)

Farming change: growing more food with a changing resource base

knowledge.cta.int/en/content/view/full/18093

This publication combines three inter-related papers on Caribbean agriculture on growing food crops without soil, securing ecosystems services of forest cover and combating invasive alien species. The first paper presents the types of soils, their suitability to food production, the soil fertility and degradation, the latest advancement in soilless technologies and some enabling policy options. The second paper describes the types, functions and services of forested ecosystems in the Caribbean (timber and non-timber use, provision of water supply, soil protection, and the problem of hillside deforestation for agriculture). The third paper covers the issue of biodiversity destruction, including the impacts on economically important crop and animal species for food production, by focussing on the invasive alien species threat.

([IICA](#), [CARDI](#), [CTA](#), 2012)

Sustainable intensification: a new paradigm for African agriculture

knowledge.cta.int/en/content/view/full/18091

The report provides innovative thinking and examples into the way in which the techniques of Sustainable Intensification (SI) are being used by smallholder farmers in Africa to address the continent's food and nutrition crisis. It begins by examining the process and elements of Intensification itself, before considering how to ensure that the intensification is sustainable, and concludes with practical solutions in action today across the African continent, that underline the positive impacts the framework can produce if scaled up more effectively.

Report (Montpellier Panel, 18/04/2013):

www3.imperial.ac.uk/africanagriculturaldevelopment/themontpellierpanel/themontpellierpanelreport2013

Reuters AlertNet: www.trust.org/alertnet/blogs/climate-conversations/sustainable-agricultural-intensification-tackling-food-insecurity-in-a-resource-scarce-world

IIED: www.iied.org/new-paradigm-for-african-agriculture-sees-sustainable-intensification-new-light

Blog by Dr Ramadjita Tabo: www.foodsecurity.ac.uk/blog/index.php/2013/04/sustainable-intensification-a-practical-approach-to-meet-africas-food-and-natural-resource-needs

Wild foods could improve nutrition and food security

knowledge.cta.int/en/content/view/full/18088

Malnutrition could be greatly reduced and food security improved by ensuring improved access to nutrient-rich forest-derived foods like berries, bushmeat, roots, insects and nuts for the world's poorest populations. The critical role forests could play in improving food security and nutrition is poorly reflected in national development and food security strategies.

Forest foods haven't received much attention in part due to the current method of measuring food security in terms of energy (or calories) and not in terms of micronutrients, which has meant that foods that aren't a good source of calories – but have plenty of micronutrients – have been overlooked.

([IRIN and CIFOR](#), 10/04/2013)

Edible insects in a food safety and nutritional perspective: a critical review

knowledge.cta.int/en/content/view/full/18086

This paper evaluates how insects could be safely used as food and discusses nutritional data to justify why insect food sources can no longer be neglected by legislators. As new ways must be found to increase yields while preserving food quality, natural habitats, and biodiversity, the authors show how insects could be of great interest as a possible solution due to their capability to satisfy 2 different requirements: (i) they are an important source of protein and other nutrients; (ii) their use as food has ecological advantages over conventional meat and, in the long run, economic benefits.

([Comprehensive Reviews in Food Science and Food Safety](#), Vol. 12, No. 3, 2013)

Wild parent spawns super salt-tolerant rice

knowledge.cta.int/en/content/view/full/18082

A cross between two different rice parents – the exotic wild rice species *Oryza coarctata* and rice variety IR56 of the cultivated rice species *O. sativa* expels salt into the air through glands on its leaves. IRRI is perfecting the new salt-tolerant rice and will test it widely to ensure it meets all the needs of farmers and consumers. The new variety will be available for farmers to grow within 4–5 years.

([IRRI](#), 15/04/2013)

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Rice breeding in the post-genomics era: from concept to practice

knowledge.cta.int/en/content/view/full/18079

This opinion paper explains what capacities China needs in order to realise its molecular breeding strategy and meet the challenges in future rice improvement. The strategy requires tremendous investment in high-throughput genotyping, reliable/precision phenotyping and new genomics/genetic information-based analytic/application breeding tools.

([Current Opinion on Plant Biology](#), 06/04/2013)

Better wheat for a warming planet

knowledge.cta.int/en/content/view/full/18075

Using breeding tools to identify genes associated with heat tolerance, researchers from the Climate Resilient Wheat project aim to develop varieties of heat-resistant wheat. The aim is to have the first set of 'climate-resilient' varieties in five years. The research will focus on the North Indian River Plain but its results may well benefit all wheat growing regions of the world facing challenges such as limited water and rising temperatures. A wheat plant's productivity falls off dramatically when temperatures rise above 28 degrees Celsius, notably during the flowering stage.

([EurekAlert](#), 9/04/2013)

Right-sizing wheat stem-rust research

knowledge.cta.int/en/content/view/full/18071

Wheat researchers are issuing strong warnings that without increased financial support for stem-rust resistance research, Ug99, new virulent forms of stem rust first found in Uganda in 1999, could continue its movement across Africa and the Middle East and southwest Asia. Scientists have developed new wheat varieties with some resistance to the deadly disease, but the disease evolves and mutates into new forms, requiring new resistant varieties to be developed. While crucially important, the international consortium known as the Borlaug Global Rust Initiative, a US\$26 million, five-year effort is believed to fill only half the wheat research gap.

([Science Daily](#), 15/04/2013)

New cowpea varieties offer promise

knowledge.cta.int/en/content/view/full/18067

The new cowpea varieties combine extra-early maturity, high protein and high yield potential with resistance to major diseases and tolerance to heat and drought. Cowpea is a major food legume and a source of dietary protein for masses in Africa, Asia and South America. The dry grains from cowpeas are used as a pulse (edible seed) and its young leaves, pods and green seeds are also used as a vegetable. The varieties being tested were developed during the last five years from crosses involving the best cowpea lines from the International Institute of Tropical Agriculture (IITA) and those from Texas A&M University.

([AgriLife Today](#), 10/04/2013)

Gene discovery may yield lettuce that will sprout in hot weather

knowledge.cta.int/en/content/view/full/18064

A lettuce gene and related enzyme that put the brakes on germination during hot weather has been identified in an effort to climate-proof the US lettuce industries. The discovery could lead to lettuces that can sprout year-round, even at high temperatures and under water stress. The researchers further believe that because this germination inhibiting mechanism in lettuce seeds is common to many plant species, other crops also could be modified to improve their germination in hotter and dryer climates.

([UC Davis](#), 28/03/2013)

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Bridging the data gap: engaging developing country farmers in greenhouse gas accounting

knowledge.cta.int/en/content/view/full/18062

Data on agricultural GHG emissions (fertiliser applications, manure management) can only be obtained by asking the farmers themselves. While the use of mobile device technology for 'crowd-sourcing' of land management data is one of the best avenues, challenges still persist such as incentivising farmers to supply information, ensuring timely and accurate reporting, making applications simple and locally relevant. Additionally, improvements are also needed in emission factors/models, better geospatial databases for soils and climate, and deployment of distributed monitoring networks.

([Environmental Research Letters](#), Vol. 8 No. 2, 2013)

Successful climate change adaptation of rice production through social enterprise

knowledge.cta.int/en/content/view/full/18059

The adaptive capacity to climate change of this agricultural cooperative improved thanks to a flexible management system (learning-by-doing), risk analysis based on future local climate information and better extension capacity. This paper looks at how Green Net, a Thai agro-based social enterprise, works to improve adaptive capacity among its organic and fair trade rice farmer. It highlights the adaptation successes, collaborative adaptation efforts and shares advantages of such enterprises and its lessons learned from its field activities during 2007–2011.

([AgriCultures Network](#), 2013)

Key environmental impacts of global genetically modified (GM) crop use 1996–2011

knowledge.cta.int/en/content/view/full/18057

This paper updates previous assessments of the environmental impact crop biotechnology has had on global agriculture. According to this paper, the adoption of the technology has reduced pesticide spraying by 8.9% and, as a result, decreased the environmental impact associated with herbicide and insecticide use on GM crops. The technology has apparently facilitated a significant reduction in the release of greenhouse gas emissions from this cropping area, which, in 2011, was equivalent to removing 10.22 million cars from the roads.

([Landes Bioscience](#), Vol. 4 Iss. 2, Spring 2013)

Synthetic biology: what does it mean for agriculture?

knowledge.cta.int/en/content/view/full/18055

An opinion blog post on what synthetic biology (SB) concepts and avenues were discussed during a major conference on the subject: 'How will Synthetic Biology and Conservation Shape the Future of Nature?', held early April 2013 at Cambridge University. It uses biofuel to illustrate the degree of complexity and difficult challenges SB adds when used in

agriculture. This post provides an overview of a recent high level conference on SB, with links to peer-reviewed papers on the uses, advantages and problems, both ethical and environmental, synthetic agriculture can have in agriculture.

([Big Picture Agriculture](#), 14/04/2013)

Threats to the soil resource base of food security in China and Europe

knowledge.cta.int/en/content/view/full/18053

The report presents a summary of the structured discussions and recommendations made during a Sino-EU Panel on Land and Soil (SEPLS) seminar regarding urban development, land degradation and intensive agriculture in both Europe and China. Recommendations to prevent land degradation by intensive agriculture include the optimisation of the management of nitrogen fertilisers, the better use of heavy agricultural machinery to avoid soil compaction, and good maintenance of soil organic matter.

([JRC IES](#), 18/04/2013)

Central America's small coffee plantations threatened by a plant disease

knowledge.cta.int/en/content/view/full/18050

Heavier rainfall in Central America has fostered severe epidemics of the Coffee Leaf Rust pathogen and future adaptation of the cash crop was discussed at the fifth Symposium of the Specialty Coffee Association of America. World Coffee Research will conduct research on coffee genetics and institute multi-country variety trials to develop pest resistant lines from wild coffee species. Coffee has a complex genome and long time to reproductive maturity: non-transgenic solutions (preferred by specialty coffee consumers) to the rust issue may only reach farmers in 15 years. Near-term solutions include spraying safe fungicides and practicing mode-of-action rotation to limit pest resistance.

([Applied Mythology Blog](#), 16/04/2013)

Improving animal disease surveillance in the Pacific region

knowledge.cta.int/en/content/view/full/18048

Key topics of this workshop were: outbreak investigation procedures, general principles of animal disease surveillance and survey design, interpretation of survey results, and aspects of syndromic surveillance. In addition, participants were taught how to use the computer software programmes Excel, Epi Info and Epi Map to enable them to manage and display animal health investigation and survey data. This workshop is one of the main capacity-building activities of the Food Animal Biosecurity Network (FABN) project funded by AusAID.

([SPC](#), 11/04/2013)

Central America and the Caribbean to update their agricultural R&D indicators

knowledge.cta.int/en/content/view/full/18045

The project aims at updating the information on agricultural research and development in the two regions, in order to highlight the need for increased investment in those areas. The IFPRI/ASTI-CIAT-IICA Training and Implementation Workshop 'Monitoring of capabilities and investments in agricultural R&D in Central America and the Caribbean' took place 19-20 March 2013. Staff of the research institutes designated as focal points in each country are being trained in the methodology used by the ASTI, to ensure that the data is compiled scientifically and the information from the different countries is comparable.

([IICA](#), 09/04/2013)

Improved access to agricultural education in Africa

knowledge.cta.int/en/content/view/full/18043

At a March 2013 event hosted by the All Party Parliamentary Group on Agriculture & Food for Development (UK), participants discussed how the use of open educational resources (OER) can dramatically widen access to agricultural knowledge. Drawing on successful OER initiatives in Africa on teacher education and community education, they explored how a similar approach can be applied to agricultural development. They learned of a new collaboration between the Natural Resources Institute (NRI), the Open University and partners in Africa. The 'Farm Education and Training' (FARM-ED) initiative uses open and distance learning to assist smallholder farmers in Africa to tap into the wealth of existing knowledge on agricultural best practice.

([NRI](#), 21/03/2013)

Ecological livestock

knowledge.cta.int/en/content/view/full/18041

With a focus in Europe, this Greenpeace technical paper explores the options for reducing the impacts of livestock production and consumption on biodiversity loss, nitrogen and phosphorus cycles, land use change, and climate change. It defines the concept of 'land sparing', which believes that sustainable intensive agriculture will lead to more land available elsewhere for conservation and biodiversity, for example forest protection.

([Greenpeace Research Laboratories Technical Report](#), 12/02/2013)

Satellite imagery helps fight locust plagues in North Africa

knowledge.cta.int/en/content/view/full/18039

A public-private partnership develops a remote sensing product to assess vegetation conditions using satellite imagery and help to predict the locations of locust breeding grounds. The imagery, from the UK-DMC2 satellite, is used in conjunction with weather data to help create locust forecasts and focus the application of pesticides to prevent the spread of swarms. In a six-month summer campaign to fight the spread of locusts, monthly images of regions in Southern Algeria, Northern Mali and Northern Niger were acquired and used to test the system. Now, imagery is being acquired before the summer season starts, to predict as well as monitor the threat of locusts.

([British Association of Remote Sensing Companies - BARSC](#), 8/04/20103)

New method automates processing of satellite images

knowledge.cta.int/en/content/view/full/18037

A new method developed by the National Institute for Space Research of Brazil, STARS (Spectral-Temporal Analysis by Response Surface), can speed up the process of satellite mapping of agricultural areas. The new methodology is capable of describing, automatically, the spectral behaviour of different targets on the Earth's surface in various ranges of electromagnetic spectrum. The STARS allows integrating images from different sensors at any time intervals and can be used in various applications. The method is able to detect changes in the spectral behaviour as a result of human intervention such as harvesting sugar cane or deforestation.

([Geospatial World](#), 10/04/2013)

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Events | [RSS](#)

Policies for Water and Food Security in the Dry Areas

knowledge.cta.int/en/content/view/full/18036

Dates: 24–26 June 2013

Venue: Cairo, Egypt

The conference will examine the effectiveness of current and alternative water and food policy options, and identify strategies to enhance land and water productivity, food security, employment generation on and livelihoods.

[More information](#).

32nd International Vegetable Training Course

knowledge.cta.int/en/content/view/full/18035

Dates: 16 September – 6 December 2013

Venue: The World Vegetable Centre (AVRDC), Thailand

The course aims to enhance technical, scientific and managerial skills of the participants to contribute to sustainable development of their countries through increased production and consumption of health-promoting vegetables.

[More information](#).

Climate-smart territories in the tropics

knowledge.cta.int/en/content/view/full/18034

Dates: 30 September – 04 October 2013

Venue: CATIE, Turrialba, Costa Rica

The deadline for abstract submission is set for 10 May 2013.

This international conference focuses on evidence-based systems approaches to prepare for a future with less water, new and more challenging agro-ecological conditions, changing natural ecosystems and the need to adapt to the challenges of climate change. The focus will be on watersheds, fragmented agricultural landscapes, biological corridors and protected areas, integrating disciplines, actors, sectors and scales.

[More information.](#)

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

Comparative Research Networks: call for proposals for 2013

knowledge.cta.int/en/content/view/full/18033

Deadline: 31 May 2013

CODESRIA invites proposals from researchers based in African universities and centres of research for the constitution of Comparative Research Networks (CRNs) to undertake studies on or around any of the themes identified as priority research themes: Higher education and ICTs; Climate change and natural resources; Gender and youth; etc.

[More information.](#)

'Improving Nutrition Outcomes through Optimized Agricultural Interventions': Request for Letter of Interest

knowledge.cta.int/en/content/view/full/18032

Deadline: 7 June 2013

The Gates Foundation announced a new funding opportunity for the development of a consortium with both agricultural and nutrition expertise to optimize nutrition outcomes from investments in agriculture.

[More information.](#)

Intra-ACP academic mobility scheme 2013

knowledge.cta.int/en/content/view/full/18031

Deadline: 10 June 2013

The third Call for Proposals under the Intra-ACP academic mobility scheme was launched. The general objective of the programme is to promote sustainable development and poverty alleviation by increasing the availability of trained and qualified high-level professional manpower in African, Caribbean and Pacific countries.

[More information.](#)

Agricultural Research Connections Workshop 2013

knowledge.cta.int/en/content/view/full/18030

Deadline: 10 June 2013

The goal of these workshops is to catalyze new research partnerships among high-caliber scientists who could then compete for funding through calls for proposals such as the upcoming Program for Emerging Agricultural Research Leaders (PEARLS), with projects led by scientists in African national programmes.

[More information.](#)

Young Innovators Competition 2013

knowledge.cta.int/en/content/view/full/18029

Deadline: 30 June 2013

ITU is looking for the next generation of social technopreneurs – young people aged between 18 and 26 with an inspirational ICT-based solution to developmental challenges. Ten winning finalists will be selected to attend ITU Telecom World 2013.

[More information.](#)

Jobs | RSS

Agribusiness and Innovation Capacity Development Specialist

Apply by: 30 June 2013

ICRA – The International Centre for development oriented Research in Agriculture – is looking to hire a specialist to design, implement and manage capacity strengthening programmes and projects in Africa (with a lesser emphasis in Asia and/or Latin America) and to develop competitive proposals for capacity strengthening in rural innovation, with emphasis on agribusiness, value chain development and smallholder agriculture.

[More information](#) [PDF].

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