



ACT launches the International Conservation Agriculture Advisory Panel for Africa (ICAAP-Africa)



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Challenged by the 2013-2022 Strategic Plan motto of “[Turning Conservation Agriculture Knowledge into Action](#)” and guided by the Lusaka Declaration of the 1st Africa Congress on CA (IACCA) to reach 25 million farmers practicing CA in Africa by 2025, an advisory body to the African Conservation Tillage Network (ACT) on all thematic areas related to the adoption and scaling of CA is called for. It is in this backdrop that the Network has established the International Conservation Agriculture Advisory Panel for Africa (ICAAP-Africa) to illuminate the way forward and strengthen the needed strategic support for the uptake and spread of CA in the continent.

ACT considers that over the coming decades, agriculture in Africa must undergo a transformational change to feed its growing population and contribute to economic and environmental development. Sustainable agriculture production intensification, quite rightly, has become a popular global development theme in recent years. The main reason for this is that it is increasingly being recognized in leading agriculture development circles that conventional tillage agriculture causes unacceptable level of soil erosion and land degradation, loss of competitiveness and resilience, and no longer delivers the required productivity, economic and environmental performance sustainably. The unsustainable nature of the conventional tillage agricultural paradigm is not new and has been known for several decades. However, during the past 25 years or so, an alternate agro-ecological option has emerged that can reverse the degradation trends of conventional tillage agriculture and mobilize greater crop and land potentials while delivering ecosystem services. This alternate paradigm is referred to as Conservation Agriculture (CA).

Mainly a farmer driven phenomenon, CA deserves full policy and institutional support from the public, private and civil sectors in order for it to be mainstreamed. Nowhere is this more urgent than in Africa where achieving sustainable food security, poverty alleviation and economic development are high priority objectives. The encouraging news is that despite the prevailing development challenges, CA had spread over more than 1.2 million hectares in Africa by 2013, representing an increase in uptake of some 750,000 hectares since 2008/09, mainly by smallholders.

Comprising eminent development experts and scientists from around the world, and Chaired by Professor Amir Kassam, ICAAP-Africa will serve as a ‘think tank’ of the ACT Board and provide strategic advice and support to mainstreaming and get CA higher on Africa’s socioeconomic and political agenda.

More information on ICAAP-Africa can be found at: <http://icaap.act-africa.org/>

Brussels development briefings: emerging donors and rising powers in agriculture in ACP countries

The ACP-EU technical Centre for Agricultural and Rural Cooperation (CTA), the European Commission, the EU Presidency, the ACP Group, Concord, and other partners organize regular development Briefing sessions in Brussels on key issues and challenges for rural development in the context of EU-ACP cooperation. The target group of such Briefings is the wider ‘development’ community in Brussels (EC services, European Parliament, NGOs and networks, ACP group, EU Member States representative).

On Tuesday 27 October 2015 from 9:00h to 13:00h at the ACP Secretariat a high profile briefing on “Emerging donors and rising powers in agriculture in ACP countries” took place. The Briefing discussed key challenges and new opportunities to enhance South-South and Triangular cooperation with the objective to: i) review successes and the lessons learned from research and



practice; ii) promote the exchange of information on best practices and drivers of success; iii) feed into the debate various perspectives on policy options. It was purposed to review the key challenges and opportunities in South-South cooperation in agriculture and the lessons learned from research and practice looking at examples of successes in South-South and Triangular partnerships across the ACP.

In this briefing, ACT presented on “Best approaches and partnerships in

South-South cooperation - Triangular cooperation in support of Conservation Agriculture” through the Executive Secretary, highlighting previous excellent South-South cooperation and partnership in support of CA promotion in Africa. The presentation can be accessed at <http://tinyurl.com/brussels-briefing-ACT>

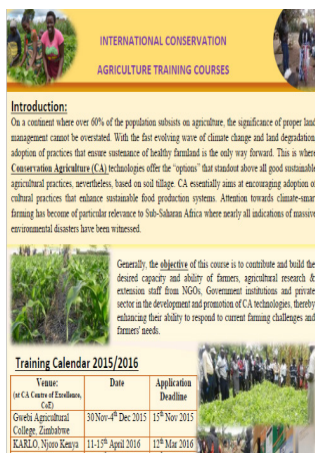
For more on the Briefings: <http://brusselsbriefings.net/about/> or <http://tinyurl.com/owzu4hc>

International Conservation Agriculture Training Courses

Accelerated adoption of climate smart agriculture (CSA) technologies is a pre-requisite for vulnerable communities in Africa to increase productivity for an ensured food security, adaptation and mitigation to the vagaries of climate change. Adoption of CSA technologies is, however, lagging far behind expectations; as constrained by poor access of communities to the CSA technologies and services, to inputs supply and output markets, and to demanded information, knowledge and skills.

ACT in partnership with four CA Centres of Excellence (*Gwebi College – an affiliate of the University of Zimbabwe; Egerton University in partnership with KALRO; ARI Uyoale backed by Sokoine University of Agriculture; and the University of Bobo Dioulasso*) are due to popular demand, re-launching the International Conservation Agriculture Training Courses. The calendar for scheduled courses in the first three CoEs can be accessed through the link [CA trainings](#).

The main **objective** of these courses is to contribute and build the desired capacity and ability of farmers, agricultural research & extension staff from NGOs, Government institutions and private sector in the development and promotion of CA technologies,



INTERNATIONAL CONSERVATION AGRICULTURE TRAINING COURSES

Introduction:
On a continent where over 60% of the population subsists on agriculture, the significance of proper land management cannot be overstated. With the fast evolving wave of climate change and land degradation, adoption of practices that ensure sustenance of healthy farmland is the only way forward. This is where Conservation Agriculture (CA) technologies offer the 'options' that stand above all good sustainable agricultural practices, nevertheless, based on soil tillage. CA essentially aims at encouraging adoption of cultural practices that enhance sustainable food production systems. Attention towards climate-smart farming has become of particular relevance to Sub-Saharan Africa where nearly all indications of massive environmental disasters have been witnessed.

Generally, the objective of this course is to contribute and build the desired capacity and ability of farmers, agricultural research & extension staff from NGOs, Government institutions and private sector in the development and promotion of CA technologies, thereby enhancing their ability to respond to current farming challenges and farmers' needs.

Training Calendar 2015/2016

| Venue | Date | Application Deadline |
|--------------------------------------|---------------------|----------------------|
| For CA Centres of Excellence only | | |
| Gwebi Agricultural College, Zimbabwe | 30 Nov - 4 Dec 2015 | 15 Nov 2015 |
| KALRO, Njoro Kenya | 11-19 April 2016 | 13 Mar 2016 |
| UNL, Uyoale Zimbabwe | 15-21 Aug 2016 | 18 Jul 2016 |

thereby enhancing their ability to respond to current farming challenges and farmers' needs.

At their respective regions, the participants would be expected to appreciate the imperative need of nurturing a new attitudinal approach in the working environment towards implementing farmer and environment-friendly technologies including CA

A broad range of approaches, depending on the specific training objectives and partner needs, are used to deliver the capacity building and training programmes. One of the pillar approaches is through partner institutions termed CA Centres of Excellence (CoE), whereby formal demonstrations, research and training on CA are implemented. Development of the curricula and selection of Teaching Teams for any CA course are structured through a ratification process by the International CA Advisory Panel for Africa (ICAAP-Africa).

For more information, on the training courses: [CA trainings](#)

The role of Conservation Agriculture in sustainable production intensification for smallholder farmers in Africa – IACCA publications with Environments

In recent years, production intensification in smallholder farming in Africa is benefitting from the adoption and spread of Conservation Agriculture (CA). CA is an agro-ecological approach to sustainable production intensification based on implementing three inter-linked principles: (i) minimum soil disturbance, (ii) maintenance of organic soil cover, and (iii) diversified cropping system, along with other good agricultural practices including integrated management of crops, nutrients, water, pests and farm power and energy.

The [Special Issue](#) is comprised of selected papers from the First Africa Congress for Conservation Agriculture (<http://www.africacacongress.org/>) plus additional invited papers from researchers working on CA systems in Africa. The Congress focussed on 'Building Entrepreneurship and Resilient Farming Systems' as a basis for sustainable production intensification. It offers papers on research and adoption of CA from across Africa, elaborating on the role of CA in the enhancement

of: productivity, efficiency of input use, soil health and quality, and resilience to climate variability.

The Special Issue "The Role of Conservation Agriculture in Sustainable Production Intensification for Smallholder Farmers in Africa" has been published with the *Environments* (ISSN 2076-3298) open access journal with Prof. Dr. Amir Kassam (School of Agriculture, Policy and Development, University of Reading, UK) and Saidi Mkomwa (African Conservation Tillage Network (ACT), Nairobi, Kenya) as Guest Editors.

We present in this alert, the first batch of the open access published papers as follows:

Where to Target Conservation Agriculture for African Smallholders? How to Overcome Challenges Associated with its Implementation? Experience from Eastern and Southern Africa. By F. Baudron *et al.* *Environments* 2: 338-357 (2015).

Effects of Conservation Agriculture and Fertilization on Soil Microbial Diversity and Activity. By J. Habig and C. Swanepoel. *Environments* 2: 258-284 (2015).

Mechanization of Conservation Agriculture for smallholders: Issues and options for sustainable intensification. By B. Sims and J. Kienzle. *Environments* 2: 139-166 (2015).

Evidence and lessons learned from long-term on-farm research on Conservation Agriculture systems in communities in Malawi and Zimbabwe. By C. Thieffelder *et al.* *Environments* 2: 317-337 (2015).

Mulching and Fertilization Effects on Weed Dynamics under Conservation Agriculture-Based Maize Cropping in Zimbabwe. By F. Mtambanengwe, *et al.* *Environments* 2015, 2(3), 399-414; doi:[10.3390/environments2030399](https://doi.org/10.3390/environments2030399)

For information on these papers; http://www.mdpi.com/journal/environments/special_issues/conserv_agric_Africa

Residue retention helping to control millipedes menace in Laikipia County



Farmers in Laikipia Kenya have been decrying over increased number of millipedes which have been wreaking havoc in their farms. The pests have been invading myriads of farms feeding on all types of crops during germination. This problem has existed since the year 2009. Their continued crop damage has forced farmers to shun producing tuber crops such as Irish potatoes, Sweet potatoes and Carrots which are worst affected. Consequently, acreage under crop production have also been reducing in an attempt to avert loses occasioned by millipede menace. Areas that have been worst affected are Muhonia, Endana and Matanya Locations in Laikipia East Sub-County.

Millipedes are brownish, elongated, and cylindrical to slightly flattened creatures with two (more common) or four pairs of tiny legs per body segment. They normally live in and feed on rotting leaves, rotting wood, and other kinds of moist, decaying plant matter. Generally, their role is a beneficial one in helping to break down dead plant matter. However, when they become numerous, they tend to damage sprouting seeds, seedlings, stem tubers and fruits in contact with the ground.

Crop residues act as a favourable habitat for millipedes and tend to feed on it. On a farm covered with mulch materials, millipedes concentrate on feeding on them and leave the crops to grow. In



CA, soil cover through residue retention forms an integral principle.

During the inception of the ACT-AGRA funded CA project in Laikipia County, farmers were very sceptical about leaving mulch in their farms fearing that it will aggravate the millipedes menace. However, contrary to their views, residue left has come in handy as millipedes have been “opting” feeding on the residues instead of the crops in the farm. Presence of mulch gives the crop the opportunity to germinate and grow “unharmd” by millipedes at the seedling stage.

The author of this article, Boniface Njenga, is Field Officer with African Conservation Tillage Network (ACT) in Laikipia County, Kenya

For more information: <http://ca4fs.act-africa.org/?p=134>



Farm with residues depicting good plant population after germination (left) and with scattered maize seedlings as a result of millipede's damage (right).

Tanzanian policy makers exposed to large-scale commercial and smallholder Conservation Agriculture



ACT Tanzania hosted in the last week of September 2015 a study tour that involved policy makers and other stakeholders including farmers, village and ward extension officers, CA entrepreneurial service providers, researchers and the academia. The

objectives of the study tour were to: enhance understanding of the participants on the principles of CA; strengthen the competency of the participants in areas of herbicides and weeds management and control; for the participants to observe and learn the importance of crop residual under conservation agriculture farming; observe and learn the CA equipment, its use and accessibility and finally sharing of experiences amongst the participants.

Among various take-home messages and key issues of the tour included:

- Need establishment of CA Stakeholder platform that will meet regularly to discuss matter facing CA. i.e. need to strengthening the National Conservation Agriculture Taskforce.

- CA implements should be available, accessible and affordable to farmers.
- Participatory approaches in implementing CA to promote desired and sustainability of CA technology even after project termination.

ACT is partnership with FAO Tanzania are implementing a project named “Conservation Agriculture for economic empowerment and climate change adaptation among farmers in Tanzania”. This project is aiming at building capacity of farmers, local government authorities and civil societies for up scaling adoption of conservation agriculture for decent employment and climate change adaptation and mitigation

New partnership to promote sustainable mechanization of agriculture

FAO and the European Agricultural Machinery Industry Association CEMA, an international non-profit organisation, have forged a new partnership that aims to promote wider use of sustainable agricultural mechanization in developing countries.

The two organizations will work together to manage and disseminate knowledge on sustainable

approaches to agricultural mechanization. They will also jointly develop technical programmes to support innovation in mechanization and facilitate the implementation of sustainable mechanization initiatives at the field level.

For more information on the partnership: <http://tinyurl.com/p5bybos> or <http://bit.ly/1MmLPtL>



Upcoming Events

Southern Africa Conservation Agriculture Regional Working Group (CARWG) Annual Meeting

The Southern Africa Conservation Agriculture Regional Working Group (CARWG) is planning to hold its annual meeting in Pretoria, South Africa from 30th Nov to 3rd December 2015. Making the announcement, the FAO Regional Disaster Risk Reduction/Management Office for Southern Africa (SFS-REOSA) who are the CARWG Secretariat highlighted why CA must be linked to Disaster and Risk Reduction in the context that Southern Africa is currently faced with the risk of El Nino after a year of inadequate rainfall where CA farmers performed better.

For more information contact: Hove, Lewis (FAOZA) Lewis.Hove@fao.org

Conference of the Parties on Climate Change

November 30, 2015 – December 11, 2015

Hosted by the government of France in Paris, the 21st session of the Conference of the Parties to the U.N. Framework Convention on Climate Change and the 11th session of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol aims to achieve, for the first time in more than 20 years of U.N. negotiations, a binding and universal agreement on climate, from all countries.

The conference organized by Geographical Institute, Research Centre for Astronomy and Earth Sciences, Hungarian Academy of Sciences will take place at the Hungarian Academy of

Sciences, Budapest, 31 May – 2 June 2016.

The conference main topics include: Soil science and geomorphology in Conservation Agricultural Systems; Agroecological research in Conservation Agricultural Systems; Yields and economy; Climate change and Conservation Agricultural Systems; Conservation Agricultural Systems and carbon cycle; and Land use and land cover change in the context of sustainable development.

For more information on the event, follow the link: <http://caslu2016.mtafki.hu/venue.html>

Resource links for updates

Be checking on this link for constant updates: <http://www.act-africa.org/news.php?com=68&com2=6&com3=>

You can join the CA Community of Practice (CA-CoP)- moderated by Amir Kassam http://www.fao.org/ag/ca/CA_CoP.html

See September 2015 CA-CoP postings: <https://listserv.fao.org/cgi-bin/wa?A1=ind1509&L=CA-Cop-L>

For more information, please contact: **Executive Secretary | African Conservation Tillage Network**
KARLO - Kabete, Waiyaki Way | P.O. Box 10375-00100, Nairobi, Kenya | Tel: +254 20 8076064; +254 710 122 251
Email: info@act-africa.org | Web: www.act-africa.org



Norad

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