AFRICAN CONSERVATION TILLAGE NETWORK
*Partnering for Economic Growth, Improved Food Security and a Better Environment*

07
July 2018

# Updates & News Alert

ALSO IN THIS ISSUE

1 Editor's view: Introducing the July, 2018 CA Alert
3 The second Africa Congress on Conservation Agriculture (2ACCA)
4 Africa Conservation Tillage Network's Ethiopia Mission
5 Building a resilient Eastern Africa in the face of climate change
6 Training manual greases the wheels for mechanization entrepreneurs
World-Wide Fund for Nature (WWF) stirs conservation agriculture growth
6 Conservation agriculture pays off in drought
7 Resources
8 2018 Events

## Editor's view: Introducing the July, 2018 CA Alert

Smallholder agriculture is the mainstay of food production in the world's developing countries and is key in ensuring long-term global food security. With the global population on course to exceed 9 billion by 2050, with Africa contributing above one billion, the need to meet the growing demand for more food is immediate and pressing. Agricultural production and access to food in a sustainable environment will represent one of the major challenges. The world's 500 million smallholder farms currently produce around 80 percent of our food and it is they who will have to bear the brunt of the need to increase food production by over 60 percent compared to 2007 levels. The current dominant agricultural practices, have stagnated cereal yields at 1 tonne per hectare over the 40 years, and cannot meet this forthcoming challenges. Therefore, new set of technological options are needed to ensure appropriate management of the interfaces agriculture/forestry, agriculture/climate and agriculture/human activities as well as provision of enough food to feed Africa.

Increase in food production via a process of sustainable intensification will, necessarily, require the implementation of more natural resource-friendly production methods, for example reduced- and no-till farming. It will call for a paradigm shift that entrenches conservation of the planet's natural resource base.

In Africa, Conservation Agriculture has benefitted from significant donor attention and the call to address multiple agricultural challenges, which include the pressure of expanding populations on land resources, declining soil fertility, low productivity, and the negative effects of climate variability. Research has proven the biophysical and economic benefits of CA for Africa, yet CA adoption and spatial expansion by African farmers is relatively low, compared to its acceptance in similar agro-ecologies in the Americas and Australia.

Conservation Agriculture is considered as a tool to produce more and sustainably while ensuring soil health. It gives the opportunity to use different mechanization levels, from hand tools to animal power to motorized. CA can be practised in diverse conditions, from the Sahel to humid tropics, from drought tolerant cereals such as pearl millet to maize and plantation and tree crops such as bananas and cocoa, leading to the promotion of agro-forestry in predominant forest ecosystem areas.

Each context brings different challenges regarding the implementation of CA, and many technologies can be adapted, including traditional ones. Technical solutions should be innovated through close partnerships between farmers, private sector industries, extension services and researchers. This approach has already permitted the development and adaptation of CA for small and big farms, in various agro-ecological zones and socio-economic contexts, and for many farming systems.

It is in the above context, that ACT - being the premier organization in promotion of CA in Africa - brings together expert knowledge, information, and insights from practitioners from across different sectors and interests groups from the public, private and civil sectors under one roof to discuss and strategically agree on scaling-up CA as an integral part of the growing food and agriculture systems in Africa. For 2018, ACT in collaboration with the Government of South Africa, African Union Commission, the NEPAD Agency, Regional Economic Communities, International NGOs, Norwegian Agency for Development Cooperation (NORAD), European Union (EU), Food and Agriculture Organization (FAO) of the UN and various bilateral and multilateral partners have organized the Second African Congress on Conservation Agriculture (**2ACCA**) to be held in **Johannesburg, South Africa**, from **9 to 12 October 2018** under the *theme "Making Climate-Smart Agriculture Real in Africa with Conservation Agriculture: Supporting the Malabo Declaration and Agenda 2063*". This is intended to concentrate the various stakeholders to identify the best solutions for all regions in Africa to support the Malabo Declaration and Agenda 2063. The 2ACCA, as

the forum for the continental Conservation Agriculture Community to support the transformation of African agriculture, is organized and consolidated as one of the most important meeting on the continent dealing with agricultural change as desired by the Malabo Declaration and Agenda 2063

Preparations for this event are in full gear under the able leadership of the International Steering Committee. The event is expected to be attended by over 600 delegates drawn from Smallholder and Large-scale farmers, Farmer Organizations, Private-Public Conservation Agriculture Investors, Financial institutions, Non-governmental organizations and Extension service providers. Others are Equipment Manufacturers, Other Inputs Suppliers, Researchers and the Academia, Policy makers, Development partners, National governments, Regional and International organizations. – from Africa and across the Globe. It is an opportunity for YOU too to be heard and contribute to making climate smart agriculture real in Africa.

In this July 2018 issue, we highlight some of the farmers' success stories as regard to CA from different African countries as testimony of the envisioned benefits being accrued in different regions. It has proven to be transformational and life changing experience for the few, but exponentially increasing farmers who have fully adopted CA, considering the impact reports and case studies from the different parts of the continent. This issue also gives priority to the second Africa Congress on Conservation Agriculture (2ACCA), highlighting its prerequisites endeavours and during the congress activities.

Therefore, we seek your total involvement in what will be discussed under the main theme, the sub-themes and the entailing process. Share your views on programme activities to be included and we will also reach out to you for input.

The 2ACCA organizers recognize the critical roles of farmers in the promotion, adaptation and adoption of CA based technologies and systems. Consequently, any and all contributions from other 2ACCA stakeholders, - be it on policy, research, learning, skills development, awareness creation – must thus be aligned to and address the challenges farmers face in realizing their full CA adoption vision. Special invitation is also extended to the CA value chain enterprises and agribusinesses.

Your participation in the 2ACCA will be highly regarded in shaping the promotion and adoption of Conservation Agriculture in Africa. For registration and more information about the 2ACCA, go to the congress website www.africacacongress.org or write to us at info@africacacongress.org

ACT acknowledges the various sources, authors, reporters, organizations and practitioners whose articles appear in this July 2018 issue, their geo-diversity is a clear testimony of the enthusiasm and interest from various organizations, countries, researchers and scientists in Africa towards Conservation Agriculture.

We encourage you to share your CA views and articles capturing the status and extent of adaptation and adoption of CA in any Country in Africa or beyond for sharing with others. Please submit articles, links or views to kim@act-africa.org. Use the ***#conservationagriculture, #africamechanize*** to share links on articles, journals, news on CA and tag us on twitter **@ACTillage.**

**Apologies for any cross posting of some articles.**

# The second Africa Congress on Conservation Agriculture (2ACCA)

The organizers of the 2ACCA collectively strive to a Congress that will, in both content and process, be attractive and worth-the-while not just to the CA networks, but other players and interest groups/organizations that may be important for enhanced CA value chain development and adoption. The congress will host leading regional and international speakers showcasing the latest updates on sustainable agriculture and ecosystem management. The 2ACCA process will be characterised by some key elements, which include; Plenary High Level Ministerial Panel discussions, Special Farmers' Session, Special session on Reporting Progress on 1ACCA, Case Studies and special working groups (thematic parallel sessions), Self-organized meetings around key CA-related issues (side-events), Exhibition Booths and Poster Sessions, Equipment and machinery displays, Field Visits and finally CA A wards and Gala dinner.

## The CA Awards and Gala Evening

The initiators of the Africa Congress on Conservation Agriculture (ACCA) therefore take pride in greater performance, diversity, and innovation in the promotion and adoption of Conservation Agriculture in Africa. They honour and recognize outstanding individuals or organizations dedicated to adaptation, promotion and adoption of best quality Conservation Agriculture in the continent. To accomplish this, a highly regarded award scheme dubbed "**Conservation Agriculture (CA) Awards**" has been established as one of the key "permanent" endeavours to identify and appreciate the CA pioneers and champions who are engaged in transforming agriculture in Africa based on the concepts, principles and practices of Conservation Agriculture systems.

2 ACCA
SECOND AFRICA CONGRESS ON CONSERVATION AGRICULTURE
9th- 12th October 2018 | Johannesburg, South Africa

The search for the winners of the 2018 CA Awards is open and nominators invited to **NOMINATE** outstanding individuals or institutions/organization that have made exemplary contributions, in diverse means, contributed to the promotion, adaptation and adoption Conservation Agriculture, as well as raise awareness on the different experiences in Conservation Agriculture in Africa. The winners will be unveiled at a high profile CA Gala Event at the 2ACCA. The CA Awards are designed to have a financial or in-kind grant, certificate and a trophy. The organizers of 2ACCA invites sponsors to support the different award categories based on their interest and focus.

The 2ACCA Secretariat, categorizes its Awards scheme according to different roles in the promotion of CA, the intention being to reward pioneering or champion efforts to overcome CA promotion and adoption obstacles and encourage others to follow or emulate them. During the 2018 2ACCA, six distinct categories of Awards will be recognized. For each category, different eligibility criteria, selection process and nomination procedures apply as recommended by the 2ACCA International Steering Committee (ISC). Information on these can access through the following link https://caawards.africacacongress.org/nomination-process/. For more information on the CA Awards, kindly visit the link https://caawards.africacacongress.org/

Thus, be part of the movement by nominating a farmer, a journalist, or policy supporter champion

## Equipment and machinery displays

The key to convincing farmers that CA is a worthwhile practice to adopt is to promote and provide equipment that farmers can use to experiment with that also does a good job of seed placement (and fertilizer if possible) into the permanent soil cover so germination is good while at the same time soil disturbance is minimized. Mechanization (especially power units, seeders, rippers and sprayers) is a key input for CA and smallholder farmers often have difficulties in making the necessary investments. With the right equipment, selected for the needs of their local clientele, and the right technical and business management training, such entrepreneurs can make a livelihood by supplying high quality CA and other mechanization services on a fully costed basis.

The aim of the Equipment and machinery displays will be to expose delegates to the latest CA based mechanization and technologies, share evidence and to challenge this status and practice. It is also purposed to provide room for different organisations, especially NGOs, farmer associations, private companies, publishers, and others dealing with CA mechanization along its value chain to present themselves and their mechanization work relating to CA.

*Continued on Page 4*

*From page 3*

These sessions will provide an opportunity for exhibitors to enjoy the warmth of personal contact in face-to-face meetings with local, regional and international visitors to the congress; promote brand loyalty and transfer knowledge via technology displays, hospitality and networking; interact with the Media and press conferences and develop a strong brand building environment via product demonstrations, seminars, conferences and sponsorship opportunities. It could also provide an ideal platform to launch new products and find sales agents or distributors in new markets among others

Companies or Organisations can apply for a booth, where they can expose machinery, equipment photos and posters when they are registering for the congress. To register and indicate that you require a booth, kindly visit: https://www.africacacongress.org/registration.html.

In addition, you can get more information from the Sponsors and Exhibitors prospectus at https://www.africacacongress.org/generaldownloads/prospectus-sponsors-exhibitors-2nd-acca.

### Field Visits

The field visit is intended to increase awareness on conservation agriculture (CA) as a first step towards increasing the uptake of CA in Africa by: exposing the participants to a variety of conservation agriculture practices; providing a platform to share existing efforts and current developments on CA; and promoting increased/wider uptake CA in the sub-region.

As it is usually said, "It is not through constantly seeking new landscapes that we grow the most. We truly outgrow ourselves when we take the time to look at familiar landscapes with new eyes" the 2ACCA will organize field visits to its participants to explore how CA is applied and practice and be able to understand and connect with how the technology is adapted and adopted. The visit will involve visiting the drivers of CA in South Africa comprising support entities and enterprising CA farmers who are promoting conservation agriculture and those that are successfully practising and benefitting from it.

The National Organizing Committee with the secretariat will identify, profile and route various suitable filed visits sites, this will be avail to the participants to select the route of their interest during the congress.

For details and field information, consult with the secretariat via email to cacongress@act-africa.org

# Africa Conservation Tillage Network's Ethiopia Mission

African Conservation Tillage's (ACT) Executive Secretary and Strategy and Policy adviser visited different stakeholders in Ethiopia from July 9-13, 2018. The objective of the visit was to discuss on the CA Centre of Excellence (CoE) partnership, invite stakeholders for the upcoming Second African Congress on Conservation Agriculture (2ACCA) in October 2018 and Conservation Agriculture Awareness workshop in Ethiopia in November 2018.

During the mission, the team met and discussed several issues with different stakeholders as described below:

The ACT team met with the Deputy State Minister, Dr Eyasu. The purpose of the visit was to appreciate the strong leadership and commitment of the Ministry on CA institutionalization and make a follow up on the progress of CA implementation strategy approval.

***Courtesy visit to the Deputy State Minister at his office***

The ACT and Haramaya University CA CoE memorandum of understanding was signed by ACT Executive Secretary - Engr. Saidi Mkomwa - and the Acting President of Haramaya University - Dr. Jemal Yousuf Hassen. It was witnessed by Prof Nigussie Dechassa, Vice-President for Academic Affairs.

Under the MoU, ACT will partner with and support the university in developing CA-based research, tertiary agricultural training institutions curricular, and outreach systems.

The ES and policy adviser attended the regional CSA meeting from July 10-12, 2018. FAO organized the meeting and regional CSA team had agreed on the establishment of the regional CSA platform and networking with IGAD, East African Community (EAC), UNECA, AGRA, EAFF, ASARECA and other stakeholders including EAC and IGAD member states (Ethiopia, and Uganda).

Other stakeholders engaged included: The Sustainable Land Management Program (SLMP II), Norwegian Development Fund and Agri-profocus.

For more information on the mission - Read more

***Participants of the CSA meeting***

# Building a resilient Eastern Africa in the face of climate change

Eastern Africa's farmers face an array of challenges related to climate change (e.g. drought and flood) with serious consequences for agricultural production. The FAO Sub regional Office for Eastern Africa (FAOSFE) and its partners are supporting countries in the sub region to respond proactively to such challenges through supporting climate smart agriculture (CSA) activities.

Consequently, FAOSFE and platform members held a workshop aimed at reviving and operationalizing the Eastern Africa Climate Smart Agriculture Platform (EACSAP). The workshop also aimed at resolving the organizational, institutional and technical issues affecting the platform, and agreeing on the implementation plan for the year 2018/2019.

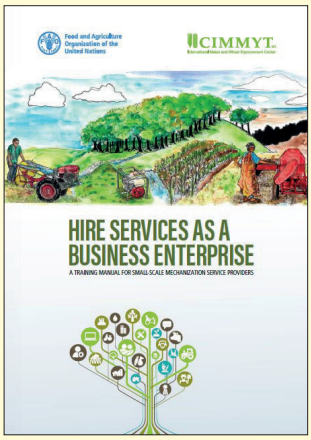
In remarks provided on behalf of David Phiri, FAO Sub-Regional Coordinator and Representative to the AU and UNECA, Abisola Alaka, Senior Administration Officer, noted that farmers in Eastern Africa face challenges related to climate variability and change that compound the problems of land degradation, poor soil fertility and lack of access to appropriate inputs and technologies. She stressed the need to strengthen the EACSAP in order to harmonize efforts in building a climate resilient sub-region, adding that, "There is a need for the existence of functional and effective national and sub-regional CSA coordination platforms and information sharing, adoption of appropriate CSA practices, putting in place conducive policies and institutions, and mobilizing the necessary financial resources for sustained action to contribute to the 2030 Agenda for Sustainable Development Goals."

Participants included representatives from ministries of agriculture in Eastern Africa, regional economic communities (EAC and IGAD), East Africa Farmers Federation (EAFF), African Conservation Tillage Network (ACT), research institutions, and development partners working on CSA. The workshop conducted a thorough analysis to identify key organizational, institutional and technical issues affecting the platform. Moreover, participants shared ideas on how to revitalize the CSA platform and also identified partnerships for new CSA initiatives in the sub region.

Some of the major recommendations of the workshop include the need to transform the EACSAP into the Eastern Africa Climate Smart Agriculture Alliance (EACSAA) for more effective coordination and promotion of CSA activities in the sub region. A proposal was made for the alliance to be chaired by the IGAD Climate Prediction and Applications Centre and co-chaired by EAC, as well as for an expanded Steering Committee to include all key CSA actors in the sub region such as universities, private sector, resource partners and the East African Legislative Assembly. Participants also agreed that membership would be open to any interested parties involved in CSA activities. Read More

***The workshop created a platform to coordinate activities of CSA and identify resource mobilization opportunities. Photo credit ©FAO/Tezeta Hailemeskel***

# Training manual greases the wheels for mechanization entrepreneurs




It sets out a syllabus which trainers can tailor to local environments to equip entrepreneurs with essential business skills and knowledge to promote appropriate mechanization farmers need to sustainably intensify production, said Josef Kienzle, an agricultural engineer at FAO.

The manual will initially be rolled out in sub-Saharan African rural communities where improved access to agricultural mechanization is crucial, he said. Small scale mechanization, such as two-wheel tractor based technologies including direct seed planters, represent a shift away from destructively intensive agriculture. However, the decline of hire tractor schemes means resource-poor farmers often lack the financial means to obtain them, said Bruno Gerard, director of CIMMYT's sustainable intensification program.

"To increase the productivity, profitability, and sustainability of their farms, family farmers need greater access to affordable yield-enhancing inputs. Hire service providers can improve access to mechanization that reduces labor drudgery and promotes sustainable intensification practices," he said. Read More

# World-Wide Fund for Nature (WWF) stirs conservation agriculture growth

FARMING remains one of the major economic activities for many families in Zambia and has potential to replace mining as a major income earner for the country. However, even with ample farming land stretching over 9 million hectares of cultivatable landscape, only 14 percent of this land is cropped each year, making it difficult for the sector to take top slot in being the food basket of the nation. According to the Zambia Agriculture Research Institute (ZARI), there are approximately 1,300,000 farmers in Zambia, with 75 percent of these practising at small-scale level and only 8 percent churning out commercial harvest.

It is this huge margin of small-scale farmers that the World-Wide Fund for Nature (WWF) has embraced in projects to improve yields through conservation agriculture (CA).
The organization has been implementing a Climate Smart Agriculture project in Western Province (Sesheke and Sioma Districts) since 2012.Recently, WWF recently convened stakeholders to enhance key partner interest, learning and experience sharing among farmers, promoters and regulators of the agricultural sector at national and regional levels. WWF Zambia policy and advocacy coordinator Bwendo Kabanda said in August 2017, WWF Zambia commissioned a 'Lessons Learnt Study' and an 'End of Project Evaluation' of the project and findings indicated a lot of positive feedback from beneficiary farmers in terms of increased food production, incomes from sales of own farm produce as well as improved natural resources management and environmental stewardship.

"The benefits of conservation farming include being environmentally friendly, improved yields and retaining soil fertility," Inonge Mundia shared. Read More

# Conservation agriculture pays off in drought

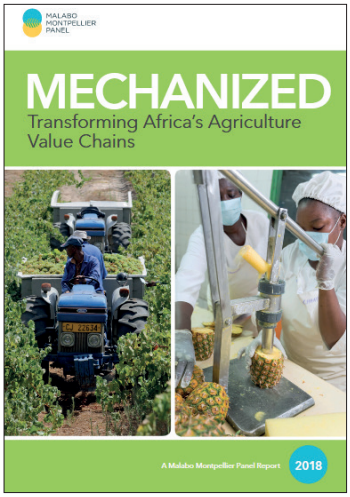
Anyone still doubting the feasibility of conservation agriculture would do well to look at a series of trials conducted in the Western Cape over the past production season. This is according to Dr. Johann Strauss, an agronomist at the Western Cape Department of Agriculture.

Strauss explains that applying conservation agriculture practices, such as crop rotation, minimum disturbance of the soil, and stubble retention, helped buffer the impact of the drought, because they improved soil health and structure, and in effect the soil's water-holding capacity. It was evident from the trials and from farms in the province that the retention of residue had a visible impact on the yield of several grain crops during last year's dry season.

"There were cases of farmers in the drier areas of the Swartland who managed to produce up to 400kg/ha more wheat than their neighbours, simply because they had more plant material on the lands," he says. "The plant material is important because it keeps the soil cool, reduces evaporation and improves the soil's water-holding capacity when it is converted to organic material in the soil." Read More

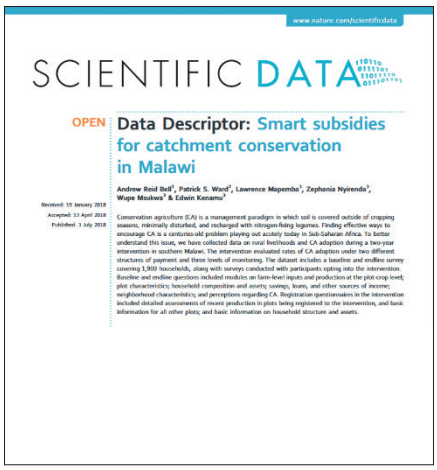
# Resources

## Mechanized: Transforming Africa's Agriculture Value Chains




The report — *Mechanized: Transforming Africa's Agriculture Value Chains*— summarizes the findings of a systematic analysis of what countries at the forefront of progress in mechanization have done right. It analyses which policy decisions were taken and which interventions were implemented to substantially increase the uptake of mechanization. The report takes a broad perspective on mechanization, including technologies along the entire value chain and how they relate to agricultural development and job creation. The report shows what can be done to sustainably mechanize agriculture to increase production and enhance value addition across value chain segments. The set of policies and practices that are identified, if brought to scale, could have significant impact on agricultural transformation in Africa. The report provides a roadmap for African governments to take concerted action to deliver on the growth and transformation targets set out by the Malabo Declaration and the Sustainable Development Goals. Read More

## Smart Subsidies for Catchment Conservation in Malawi




Conservation agriculture (CA) is a management paradigm in which soil is covered outside of cropping seasons, minimally disturbed, and recharged with nitrogen-fixing legumes. Finding effective ways to encourage CA is a centuries-old problem playing out acutely today in Sub-Saharan Africa. To better understand this issue, we have collected data on rural livelihoods and CA adoption during a two-year intervention in southern Malawi. The intervention evaluated rates of CA adoption under two different structures of payment and three levels of monitoring. The dataset includes a baseline and endline survey covering 1,900 households, along with surveys conducted with participants opting into the intervention. Baseline and endline questions included modules on farm-level inputs and production at the plot-crop level; plot characteristics; household composition and assets; savings, loans, and other sources of income; neighbourhood characteristics; and perceptions regarding CA. Registration questionnaires in the intervention included detailed assessments of recent production in plots being registered to the intervention, and basic information for all other plots; and basic information on household structure and assets. Read More

## Ribika Mathew the Happy farmer

CEO Wayne Johnson talks with Ribika about the success of her crops and the joy conservation agriculture has brought to her. Click Here to view

# 2018 Events

## 2018 No-Till Conference 4–6 September 2018

The Club is proud to present another conference to assist you in your pursuit of a more sustainable farming enterprise! The No-Till Club 2018 Conference will take place on the 4-6 September 2018 at ATKV Drakensville Holiday Resort. This Conference combined with Cover Crop Workshop is focused on managing Adversity with Diversity with Emerging Cover Crop Strategies by Making Cover Crops Pay.

The purpose and the take home message of this no-till conference is:

- It is imperative to examine your soil using analysis – checking -serious compaction-before embarking on No-Till
- Remember that No-Till is a system based on - creating protective mulch – cover crops – and a crop rotation
- Striving towards a more biological diverse and integrated cropping and livestock farming enterprise

For more information about the conference, visit: http://www.notillclub.com/index.php/conference

## Unlocking opportunities for agricultural growth and transformation through mechanization along the value chain 6th September 2018

The Malabo Mon tpellier Panel's latest report, 'Mechanized: Transforming Africa's Agriculture Value Chains' shows what can be one to sustainably mechanize agriculture to increase production and enhance value addition across value chain segments. This report summarizes the findings of a systematic analysis of what African countries at the forefront of progress in mechanization have done right on in terms of policy decisions and interventions implemented. The set of policies and practices that are identified, if brought to scale, could have significant impact on agricultural transformation in Africa.

An agricultural mechanization agenda should harness the opportunities for mechanization at each stage of the agriculture value chain. Successful mechanization along the value chain will have to be a priority in future development and growth agendas for African smallholder agriculture and will require not only new technologies but also organizational innovations, such as reliable services and cooperation arrangements for and with farmers. Mechanization of value chains, when done right, can and must be employment enhancing and need not be labor replacing. Read More

## The Second Africa Congress on Conservation Agriculture (2ACCA) 9-12 October 2018

The 2ACCA purposed to bring together expert knowledge, information, and insights from practitioners from across different sectors and interests groups at all levels of agriculture development in the public, private and civil sectors.

The diversity of intended participants will enable the desired multi-disciplinary and cross-sector "treatment" of CA for climate-smart agriculture – a feature essential for the success of CA scaling-up as an integral part of the growing food and agriculture systems in Africa.

This is in line with the Malabo Declaration, AU's Agenda 2063 and the SDGs. The purpose of the 2ACCA initiative is to facilitate diverse and open sharing of experiences and information on CA thereby fostering learning and widespread awareness and interest in the uptake and spread of CA in Africa. This includes CA's role in enhancing sustainable agricultural productivity, strengthening environmental and social resilience, and fostering efforts to provide for food and nutrition security as well as jobs and economic opportunities, especially for rural communities, including youth and women. The 2ACCA initiative provides "neutral space" for networking, collaboration and partnership to support the scaling-up of CA systems as the sustainable basis for CSA development across Africa. Learn More

Standard Registration for the second Africa congress on Conservation Agriculture opens 1st February 2018. For more information visit: Second Africa Congress on Conservation Agriculture

***ACT programs, projects and initiatives are firmly anchored towards achieving the 2030 SDGs.***

SUSTAINABLE DEVELOPMENT GOALS

**Goal1:** End poverty in all its forms everywhere

**Goal 2**: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

**Goal 5**: Achieve gender equality and empower all women and girls

**Goal 13:** Take urgent action to combat climate change and its impacts

**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; +254 774 895 077
Email: info@act-africa.org | Web: www.act-africa.org

*ACT acknowledges the partnership and financial support provided by the Norwegian Agency for Development Cooperation (NORAD) towards Promotion of Conservation Agriculture in Africa*