

AFRICAN CONSERVATION TILLAGE NETWORK

Partnering for Economic Growth, Improved Food Security and a Better Environment

Updates & News Alert February 2016

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Break the chain of desperation that leads to emergencies, development leaders told

Against a backdrop of new reports that show the number of refugees entering Europe has continued to skyrocket, senior government officials attending the final day of the International Fund for Agricultural Development's 39th Governing Council, renewed their commitment to invest in smallholder agriculture and reduce poverty in developing countries.

Recognizing that rural development plays a fundamental role in stabilizing communities and reducing migration and conflict, IFAD President Kanayo F. Nwanze told leaders that "by working together to deliver on the Sustainable

Development Goals (SDGs) - starting with zero poverty and zero hunger - we can break the chain of desperation" that leads to emergencies and humanitarian disaster.

Urgent calls for action in support of increased investment in smallholder agricultural to ensure food security, climate change adaptation, equitable prosperity and ultimately to remove the root causes that lead to conflict and migration, were shared throughout the two-day conference, held annually in Rome for senior government officials representing IFAD's 176 member states.

Read more



IFAD President Kanayo F. Nwanze (above) urged leaders to work together to deliver on the Sustainable Development Goals (SDGs)

Farm Mechanization and Conservation Agriculture for Sustainable Intensification - third review and planning meeting- Arusha, Tanzania

The third review and planning meeting for the FACASI project was held in Arusha, Tanzania in February 2016. The meeting brought together 32 participants

from the country implementation teams in Ethiopia, Kenya, Tanzania, Zimbabwe and Australia. The steering committee members were also in attendance.



Field Tour at Farm Equip, Arusha - Third review Meeting

Opening the event Dr Hussein Mansoor, acting Director for Research and Development at the Minister of Agriculture Livestock and Fisheries - Tanzania, hailed the project for the tremendous progress it has made within the last three years. He said the FACASI project objectives were in line with the Government of Tanzania priorities specifically the support for small scale mechanization.

During the four days meeting, discussions were held on the progress, challenges and opportunities made on each of the four project objectives

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Farm Mechanization and Conservation Agriculture for Sustainable Intensification

(Continued from page 1)

- Evaluating and demonstrating two-wheel tractor (2WT)-based technologies to support CA systems, using expertise and implements from Africa, South Asia and Australia.
- Testing site-specific commercial systems to deliver 2WT-based mechanization.
- Identifying improvements in national institutions and policies for wide adoption of 2WT-based mechanization.
- Improving capacity and creating awareness of 2WT-based technologies in the sub-region, as well as sharing knowledge and information with other regions. In the course of the meeting, participants were able to visit EFTA - a dedicated loan provider for equipment, Farm Equip - dealer in small tractors sales and services, Dorgo - local artisan fabricating agricultural equipment, and 2WT service providers. Key lessons from the visits are:
 - Financial linkages are available to smallholder farmers to acquire farm equipment.
 - The farm equipment dealership and network is strong in Tanzania. This could and should be tapped into, to maximize the advancement of small farm mechanization.
 - The linkage of dealers to research and to local fabricators is important in modification of farm equipment especially for smallholder farmers.
 - 2WT service providers are a business model for enhancing access to farm equipment services

For more information:

Farm Mechanization and Conservation Agriculture for Sustainable Intensification (FACASI) Project - Training on Gender Mainstreaming in Projects and Programs



FACASI gender training

FACASI project was designed to address the issue of declining farm power in Eastern and Southern Africa, and reduce the labour burden that comes with low farm mechanization, by promoting smallscale mechanization based on twowheel tractors. Thus, one of the critical aspects to this project was to see how gender issues are addressed through small mechanization and how they relate to farm power. Gender analysis studies have been carried out in Kenya and Ethiopia and a workshop on gender matters in Farm Power was organized in Addis Ethiopia in October 2015 to share and validate findings.

A project level training took place between 22nd and 25th February 2016 at Equator Hotel in Arusha Tanzania with five FACASI National implementers and partner gender focal persons from Kenya, Zimbabwe, Tanzania and Ethiopia participating. This training was aimed at ensuring gender mainstreaming in general, but more specifically to explore lessons learned to get prepared for eventual follow up interventions in agriculture. At the end of the course participants were expected to be able:

 To integrate basic concepts of Gender in Project and Program Management in the FACASI project

- To identify gender issues and remediate these in the different phases of the life cycle of a project; in identification, formulation, implementation, monitoring and evaluation
- To design a theory of change to support gender mainstreaming in the planning stage of various development interventions of their own expertise

In this course FACASI's partners are expected to build their confidence in dealing with gender equity in development interventions and society. They will practise the use of different (management) tools and models to implement strategies and understand opportunities for gender inclusion and mainstreaming. Through interactive course sessions they learned to systematically analyse gender differences and define concrete strategies intervening at deeper causes of inequity, to help them achieve equal development benefits for all beneficiaries. Participants learned to work with change management processes and networking to explore their capacities as change agents.

For more information:

Supporting Smallholder Farmers to Adopt Conservation Agriculture Practices – building on the case of Paraguay

Experience from the tractor-mechanized farmers indicates that CA in Paraguay in general works very well and in terms of continued adoption, or practice, is a success. A recent study, co-authored by Rolf Derpsch, Dirk Lange, Georg Birbaumer, and Ken Moriya, consultants and extensionists in conservation agriculture and rural development with over 20 years of experience, found that small holder farmers are faced with more challenges compared to medium and large scale farmers. However, properly implemented CA system never fails, and that an underperforming CA system on a farm signals that other factors are the reason for it. With needed technical support a farmer can transit from conventional to conservation agriculture swiftly. This experience shows that when

the deeper understanding in farmers' minds, has occurred (the 'click') and the farmer decides for himself/herself to change and to continue with the change, seldom will the farmer consider going back to the drudgery of the old system.

Similar observations have been made in Africa leading to the vision 25x25 Lusaka declaration of the first Africa Congress on Conservation Agriculture (IACCA). The declaration pointed to the need for supporting knowledge management to stakeholders including farmers by ACT in collaboration with FAO and regional economic communities (RECs).

The authors hope that the lessons learned in South America, and especially in Paraguay, in relation to the diffusion of CA among smallholders could help

in redirecting strategies in new phases of development projects in Paraguay and, perhaps, elsewhere. This will help to avoid repeating the same mistakes again. "This example underscores our argument that a long-term approach paired with the right strategy is needed for the continuous adoption of CA among smallholders. We cannot expect decades of soil destruction and degradation by tillage to be reversed within only a few years." The authors encourage seeking more examples of successful long-term CA adoption and adopters, and the reason for it, instead of looking at short-term CA cases that still seem to dominate the ongoing CA development agenda.

More information

Maize productivity and profitability in Conservation Agriculture systems across agro-ecological regions in Zimbabwe: A review of knowledge and practice

Conservation agriculture (CA) is increasingly promoted in southern Africa as a strategy to improve food security and reverse soil degradation in the face of climate change. However, the performance of CA under different environments and its ability to improve ecosystem services is still unclear. The effects of the CA options; direct seeding, rip-line seeding, and seeding into planting basins on maize grain yield,

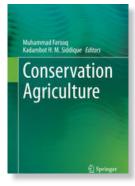
soil health and profitability across agroecological regions in Zimbabwe were evaluated through a review of literature in combination with meta-analysis.

The authors, Paramu Mafongoya et al., (2016) conclude that overall, CA improved maize yield over conventional agriculture. Compared to conventional agriculture, direct seeding, rip-line seeding, and seeding into planting basins increased yield by 445, 258

and 241 kg ha⁻¹, respectively. CA practices reduced soil erosion and bulk density, and increased soil water content in most studies. Under high levels of residue retention (6 Mg ha⁻¹), CA systems exhibited greater macro fauna abundance and diversity than conventional agriculture, particularly termites...

More Information:

Mechanisation for Smallholder Conservation Agriculture



The global annual rate of uptake and spread of Conservation Agriculture (CA) during recent years has been about 10 million hectares. It is estimated that 90% of the farmers involved in CA are smallholders in Africa, Asia and Latin America. Discovery of effective no-till seeders is known to have accelerated the adoption of CA. It is necessary to consider increased access to quality mechanisation options to enhance uptake of CA by smallholders.

This book chapter analyses the mechanised CA options and opportunities. Conservation Agriculture a farming strategy based on three principles of

Agriculture a farming strategy based on three principles of minimum soil disturbance (or direct seeding), permanent vegetative soil cover and crop rotation is seen as the alternative to tillage, with multiple benefits with regard to productivity and sustainability. The first two core principles of CA call for

specialized machinery for seeding on unploughed fields with residues, management of cover crops or crop residues and weed management. With two thirds of CA being about mechanization and use of specialized machinery, it is not surprising that close to 97 % of the 155 million ha under CA worldwide is largescale commercial farming. Direct seeding and management of soil cover are also the most difficult to implement without access to appropriate farm machinery and, in essence, are the weakest links in the CA adoption chain. Contrary to the farmerownership model, a farmer-to-farmer CA service provision model is a preferred approach to enable smallholders' access to farm machinery. This chapter provides an overview of the essential machinery requirements for the different farm operations involved in CA. Regional-specific issues with emphasis on developing countries are also discussed, and pragmatic solutions of vital interest to researchers, academia and policy makers globally are proposed.

A book chapter by S Mkomwa; P. Kaumbutho; P. Makungu is available, **download a copy**.

Upcoming Events

Forum for the Future of Agriculture (FFA2016): The Sustainable Development Goals implementation: no time for business as usual

This year's Forum for the Future of Agriculture, starting on 22nd March 2016, will be the first to take place since the Sustainable Development Goals (SDGs) were adopted by world leaders in September 2015 and FFA2016 will look at what this means for agriculture and the environment in Europe and around the world. Now that the broad agenda has been set, what concrete steps are needed to put it into practice? And is business as usual really an option anymore in the face of the enormous social, environmental, economic challenges that lie ahead? Come to FFA2016 to be part of the debate

For more information,
Visit the site: http://www.forumforagriculture.com/ or http://www.forumforagriculture.com/wp-content/ uploads/2015/10/
FFA2015programme.pdf











12th CAADP Partnership Platform Meeting

The 12th CAADP PP is organised on 11-15 April 2016 in Accra, Ghana, under the theme "Innovative Financing and Renewed Partnership to accelerate CAADP Implementation". Its objective is to discuss on the ways of accelerating the CAADP implementation to transform African agriculture in the face of emerging trends that have a direct bearing on our abilities to deliver results and impact. The 12th CAADP PP comes 20 months after the Malabo declaration and the overriding assumption for this year's event is that the issues that are really key in transforming agriculture are better known and understood today because they have been extensively reviewed by the previous CAADP PPs.

The theme for the 12th PP is articulated around financing and partnership; two dimensions now emerging as key drivers to accelerate implementation on the around for concrete results and impact. As such, the meeting will then focus on the discussions that will help fast track the implementation of CAADP in order to achieve the transformation of Africa's Agriculture at the horizon of 2025. A secondary objective of the meeting will be to review the progress on the implementation of the Malabo Declaration and strategize on how to accelerate the delivery pace and accountability mechanisms.

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