



African Conservation Agriculture Network



SECOND AFRICA CONGRESS ON CONSERVATION AGRICULTURE (2ACCA)

9th – 12th October 2018, Johannesburg, South Africa

Call for Condensed Papers

Theme:

"Making Climate-Smart Agriculture Real in Africa with Conservation Agriculture: Supporting the Malabo Declaration and Agenda 2063"

Deadline 31st May 2018

Background

The African Conservation Agriculture Network (ACT) in collaborating 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), and the Food and Agriculture Organization (FAO) of the UN, invites you to the Second Africa Congress on Conservation Agriculture (2ACCA), in Johannesburg South Africa, from 9th to 12th October 2018.

The aim of 2ACCA is 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. This diversity of knowledge and stakeholders is essential: (a) to enable the desired multi-disciplinary and cross-sector "treatment" of CA as a climate-smart agriculture; and (b) for the sustained mobilization of policy, institutional and community support to accelerate the widespread adoption and management of CA as a core element of the expanding climate-smart food and agriculture systems in Africa. This is in line with the Malabo Declaration, AU's Agenda 2063, and the SDGs.

Thus, 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. This includes CA's role in: enhancing sustainable agricultural productivity and economic return, 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 a “neutral space” for networking, collaboration and partnership to support the scaling-up of CA systems as CSA across Africa.

This **call for condensed papers** is extended to all potential participants who wish to make an oral or a poster presentation relevant to the Congress theme and any of the specific sub-themes as stated below. Authors should indicate whether they wish to do oral or poster presentations. Specifications for the posters are 90 cm wide, 120 cm high, with letter sizes readable from 2 m and with a good mix of photos, diagrams, tables and maps.

Theme: The theme of the congress is “Making Climate-Smart Agriculture Real in Africa with Conservation Agriculture: *Supporting the Malabo Declaration and Agenda 2063*”.

Sub-themes:

1. Role of CA in achieving Agenda 2063 goals and SDGs in Africa for building climate-smart agricultural systems
2. Mainstreaming of CA paradigm at the institutional and sectorial level and within governments’ systems in bringing about the sustainable transformation of agricultural systems in Africa
3. The critical role of mobilizing institutional support from the public, private and civil sectors, and catalysing local and regional CA scientific and technological innovations and practices in overcoming adoption constraints
4. Enhancing CA related education and training-learning capacity and creating an enabling policy environment in support of the “last-mile” institutions and stakeholders to accelerate and expand the uptake of CA systems and practices
5. Investing across institutions and sectors for widespread adoption and commercialization of CA systems for achieving Agenda 2063.
6. CA knowledge system management and information sharing capacity development for impact.

Template for Condensed Paper submission to 2ACCA

This MS Word.doc file has been formatted using the style-sheet required for your condensed paper. Use the styles as presented in this template or follow the formatting instructions below or in the annexed ‘**sample paper**’.

Important notes to all authors

- In the normal course, editors will not accept more than one opportunity for revision.
- Condensed papers are limited to a maximum of 3 pages including text, tables and or figures and references.
- The Title should be brief but specific to the subject of your paper.
- The condensed papers should be structured in the following sections: Introduction, Methods, Results & Discussion, References, Graphs and Tables (though variations might be accepted).
- Authors’ names and addresses should be shown below the title, as specified under Author’s names and Author’s addresses below.
- A selected number of the best condensed papers will be identified for publication as full papers in a range of scientific journals or a book.

Language

Condensed papers must be in either English or the French language.

File name

Name your completed Word document as follows:

2ACCA2018underscore last name *plus* initials.doc (e.g., **2acca2018_mkomwas.doc**). Use all lowercase.

Text

- Use “**Times New Roman**” for all text including headings. Left align all text, images and tables.
- Use the **Normal** style for all text (style-normal) where possible in preference to “Body text” styles. Normal text should be font size 12, with single line spacing.

- Do not indent the first line of a paragraph. Leave one blank line between paragraphs and before new section headings.
- Authors' email and web addresses may be hyperlinked. Hyperlinks to external web references should be placed in the References section, rather than in the body of the paper.
- Use List Bullet or List Number styles where appropriate for dot point or numbered lists.

Headings and sections

- **Paper title:** 14 font size, bold, sentence case (capitals for proper nouns only). If the title extends to a second line, do not use "enter" to break the line. Leave one blank line below the title.
- **Authors' names:** 12 font size. First name initials should come after the family name for each author. Highlight the **presenting author** in bold. Use superscripts to indicate different addresses.
- **The Email address of the corresponding authors should be provided** below the affiliation.
- **Section Headings:** 12 font size, bold, not italic for Headings 1, and 11 font size italic for Headings 2. Use descriptive names for Section headings where appropriate but **Introduction, Material and Methods, Results and Discussions and References**.
- **Keywords heading:** 11 font size, bold.
- **Keywords:** (style-keywords) 11 font size, not bold. Up to five key words not used in the Title. Leave one blank line below the key words.
- **References:** A simplified form of the Harvard system (also known as the author-date scheme) with minimal punctuation is suggested (see also attached example).

Figures and images

- No colour printing will be available in the book of condensed paper, so make sure that your graphs, symbols and figures are readable in a black and white print.
- Figures and images should be placed in the additional page following the references. Figures and images should be self-explanatory e.g. should include caption description.
- Images in either colour or black and white are acceptable. Images files can be inserted using **Insert>Picture>From File**. Suitable formats include JPG, GIF, BMP and TIFF. Images should be cropped and reduced where possible to produce a file size of around 300kb or less before inserting into Word.
- A table with borders removed can be used to arrange two or more images or figures side by side.
- If the drawing tool is used to create a diagram, group the objects using the **Select Objects** arrow on the **Drawing toolbar** and then choose **right-click>Grouping>Group**.
- **Captions** for Figures and images should be 11 font size, left aligned, placed below the image.

Symbols

- As far as possible use **Insert>Symbol** and select a character from the "**normal-text**" font set at the top of the Font drop-down list rather than the "**Symbol**" or "**Wingdings**" font set.

Tables

- Use tables, do not use tabs or spaces to align images and text. Remove borders from tables and insert horizontal lines only as illustrated (Table 1) using **Format>Borders and shading**.
- Use the **Insert Table** button on the Standard toolbar and left align tables. Keep formatting simple.
- Captions should be placed above the table using the same Caption style and 11 point.
- Data columns should generally be centered or left aligned.

Page Layout

- Margins should be set at 2 cm all round.
- Do not indent paragraphs.

The papers will be studied in strict confidence by pre-selected members of the scientific committee. In case of acceptance, the author will be notified of the acceptance of the paper and/or any requested adjustments. All contributions will be summarized in a book in French and English versions, which will be distributed to participants before the beginning of the congress. The best contributions will be selected and authors requested to refine their texts into full papers for publication.

Paper submission

Submit condensed papers for consideration to the following link: www.africacacongress.org/call-for-papers.html

A number of selected distinguished posters and videos will be honoured during the Congress.

Calendar and key deadlines

- 1st February 2018: Registration (online) opens
- 30th March 2018: Early bird registration deadline
- 31th May 2018: Deadline for submission of condensed papers
- 30th June 2018: Deadline for submission of revised condensed papers
- 9th – 12th October 2018: Congress and field tour

The Congress programme will include: Plenary Keynotes and Panel Sessions; Case Studies; Special working groups (thematic parallel sessions); Field Visits; Poster/video sessions; Open time and information kiosks; Special Farmers' Session; stalls and display of equipment and machinery.

For further information visit: www.africacacongress.org, www.act-africa.org

Or Email: cacongress@act-africa.org or helpdesk@act-africa.org

Annex: Sample Condensed Paper

Maize Yield Increases and Stabilization under Conservation Agriculture in Semi-arid Districts of Tanzania

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Keywords: smallholder farming, direct seeding, ripping, cover crops

Introduction

Frequent crop failures resulting from improper farming practices have entrenched erratic food supplies and extreme poverty in the semi arid areas of Tanzania. The conservation agriculture (CA) intervention aims at promoting practical, short term outcomes to help farmers optimise both their labour output and utilization of existing resources to maximize capture and retention of soil moisture, expand their cropping options while sustainably conserving their farm lands, and reduce the vulnerability of farm incomes. The Conservation Agriculture for Sustainable Rural Development (CA for SARD) phase 1 was a Project funded by the Government of the Federal Republic of Germany and executed by the Food and Agriculture Organisation (FAO) of the United Nations. Regional coordination and administration functions were performed by the African Conservation Tillage Network (ACT). The project aimed to contribute to the promotion of growth and improved food security in Kenya and Tanzania through the scaling up of conservation agriculture as a sustainable land management (SLM) tool. Through an increase in the numbers of CA farmer field schools, the Project was to expand the adoption of profitable CA practices by smallholder farmers in the two East African countries. To facilitate the scaling out process the Project enhanced the supply and availability of CA equipment for farmers by stimulating private sector participation in the manufacture, retailing and hiring of equipment.

Material and Methods

This paper is based on the findings from samples of six to eight farmer field schools (FFS) from a total of 14 from Arumeru and Karatu Districts in Arusha Region Tanzania for three consecutive years from 2005 to 2007. Names of the FFS with villages in brackets include Ekenyo (Kilimapunga); Ikenya (Ikiushin); Ujamaa (Rhotia Kati); Tumaini (Getamock); Kinara (Tloma) and Upendo (Likamba). The gender mixed farmer groups constituted 20 – 25 smallholder farmers and were formed by voluntary membership to establish learning by experimenting with alternative crop production technologies. Participating farmers were guided by village group facilitators and ARI Selian research scientists to select tillage, weed control and cover crop treatment options considered “best bets” in ameliorating deficiencies in soil and water resources. Selected treatments were as follows: (1) Jab planter, glyphosate weed control, lablab cover crop planted after first weeding, (2) Ripping (ox ripper), glyphosate weed control, jab planting in the ripper furrow, pigeon peas intercrop, (3) Jab planter, glyphosate weed control, pigeon peas intercrop, (4) Ripping, glyphosate weed control, jab planter, lablab cover crop and (5) Farmers practice - ox ploughing, hand hoe weed control. Plot sizes varied from one FFS to another, ranging from 390 to 1440 m². The ox ripping treatment was imposed before the first rains when the soil was friable, and to ensure the first rains were harvested with no runoff losses. Field data was collected by the farmers themselves through a participatory monitoring and evaluation approach that incorporated the empowering agricultural ecosystem analysis (AESA). Data was collected on rainfall, labour input for the field operations,

soil property changes, crop disease and insect attack/coping strategies, maize grain yield and cover crop grain yield. Recommended agronomic packages in terms of crop spacing and use of improved maize seeds were practiced. However, none of the FFS used industrial fertilizers or manure.

Results and Discussion

Effect of tillage. Ripping with either lablab or pigeon peas as cover crops produced significantly different and higher grain yields (of 1,949 and 2,043 kg ha⁻¹) compared to direct seeding with the jab planter (1,735 and 1,770 kg ha⁻¹) and conventional ox ploughing (1,353 kg ha⁻¹) during the first year of CA (Table 1). This was a relatively dry year with annual precipitation of 528 mm. The trend in yield increase differences continued during the second year with a relatively better rainfall of 755 mm. However, the higher yields in ripped sub-plots were not maintained in year 3 but were exceeded by the jab planter with a substantial soil cover of lablab (1,973 and 1,320 kg ha⁻¹ for ripping with lablab and p/peas respectively compared to 2,738 for jab planting with lablab). The ox ploughed plots produced the lowest grain yield throughout.

Effect of cover crops. The direct seeded jab planter treatments produced the second lowest and significantly different yields during year 1. Yield trends changed in year 2 as the interaction of the established cover crops on tillage treatments started to have an effect. While ripped plots with pigeon peas produced the highest yields (3,018 kg ha⁻¹ it was not significantly different to others, except the farmers practice), ripping with lablab produced the lowest yield of the tillage & cover crop treatments. The yield increase trends were consistent for lablab which produced and maintained the highest yield of 2,738 kg ha⁻¹ in year 3 (in a year with a grand mean of 1,697 kg ha⁻¹) while pigeon peas dropped drastically to 1,320 kg ha⁻¹.

Yield variations across sites. Yields across different FFS varied greatly (from a maximum of 7.6 tons/ha in Rhotia Kati for ripper with pigeon peas to 0.2 tons/ha for the farmers' practice in Getamock), which was understandable due to the differing farmer management skills and the initial degraded status of the fields.

Preferred CA technologies. Participating FFS members were encouraged to choose preferred CA technological packages for implementation in their individual farms. Of the 352 households practicing CA, 206 (64%) are FFS group members while the remaining 146 are non-FFS members enticed by the benefits of CA. The preferred planting/tillage technologies are the ripper (61%) for FFS members; most of them complimented by the jab planter for seed placement, while a few farmers place the seeds manually in the ripper furrow and cover by foot.

Gender implications to CA. Women constituted 33% of the members of the FFS during formation of the groups. Of the total 206 adopters from 8 FFS, 136 (66%) are women. Interviewed farmers in Karatu explained that 90% of their active participants are women who see an opportunity to feed their families, improve livelihoods and that most of the men are no longer available for agricultural work as they are employed in the tourism industry.

References

- Ley G J, Mkomwa SS, Mtakwa PW, Mbwaga AM. 2003. Diagnosis and amelioration of plough pans in eastern and southern highlands zones of Tanzania. In: *Proceedings of the Collaborative Research Workshop, Ministry of Agriculture and Food Security and Sokoine University of Agriculture, Morogoro Tanzania, 28–29 May 2003*. Morogoro: Tanzania Agricultural Research Project Phase Two and Sokoine University of Agriculture, PO Box 3151, Chuo Kikuu, Morogoro. Tanzania. p. 138–147.
- [URT] Tanzania, United Republic of, Ministry of Agriculture and Food Security. 2001. Development of conservation and no tillage based systems for sustainable use of the natural resource base. Project proposal in support of Soil Fertility Initiative. 41 p.

Figures and Tables

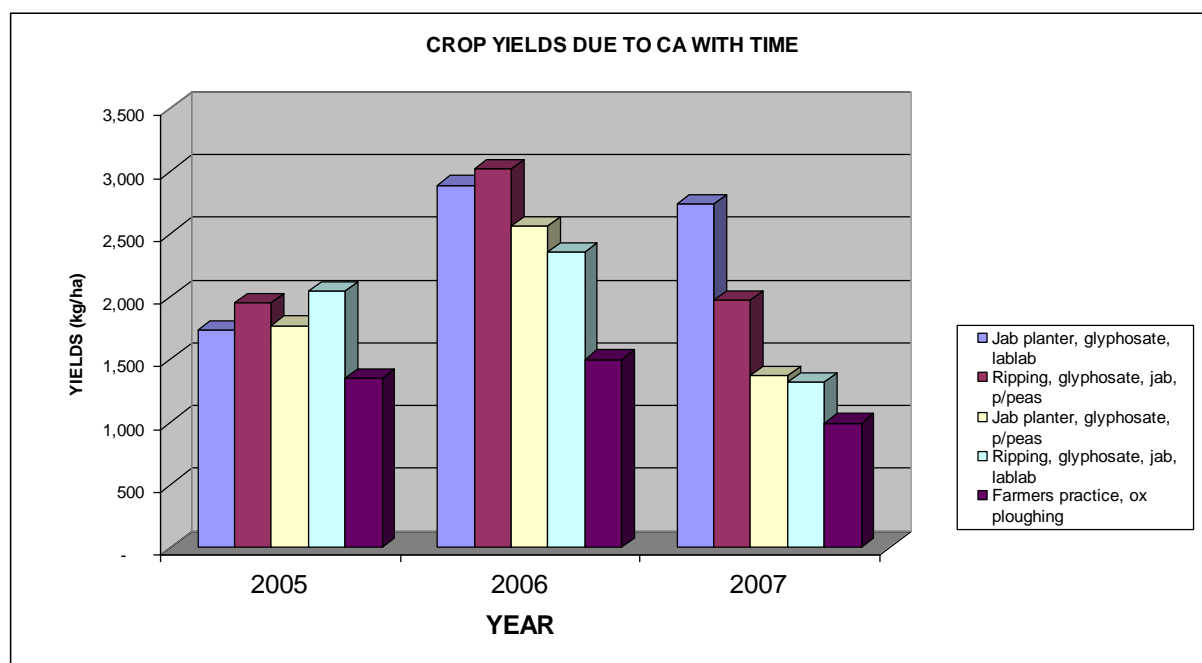


Figure 1. Maize grain yields (kg/ha) with different CA treatments and over time in Arumeru and Karatu Districts in Arusha Tanzania.

Table 1. Maize Grain Yield (Means for 6 FFS plots)

No.	Treatment	Maize grain yield (kg/ha)		
		2005	2006	2007
1	Jab planter, glyphosate, lablab	1,735	2,889	2,738
2	Ripping, glyphosate, jab, p/peas	1,949	3,018	1,973
3	Jab planter, glyphosate, p/peas	1,770	2,566	1,369
4	Ripping, glyphosate, jab, lablab	2,043	2,357	1,320
5	Farmer's practice, ox ploughing	1,353	1,502	993
	Grand mean	1,770	2,466	1,679
	Annual rainfall (mm)	528	755	988 (532 ¹)

Source: ARI Selian field data, 2007; Arusha foundation seed farm (some rainfall records).

Table 2: Percentage of adopters within 8 FFS practicing different aspects of CA

No	CA Technique	Percentage practicing		Total CA adoption
		FFS members (206)	Non-FFS members (146)	
1	Ripping	61	56	
2	Hand hoe planting	2	39	
3	Direct seeding – jab planter	57	26	
4	Direct seeding – direct seeder	12	20	
5	Lablab	66	67	
6	Pigeon peas	69	53	
	Adoption (compared to base)	151		
	Area (hectares under CA)	60		71%
	Average household area (acres)	0.75	1.03	

¹Although the annual precipitation was high (988 mm), distribution was poor as only 532 mm were available for the cropping season.