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ALL ABOUT THE FRAMEWORK FOR SUSTAINABLE AGRICULTURAL MECHANIZATION IN AFRICA - F-SAMA

African Union

Food and Agriculture Organization of the United Nations

Joint Actions on Operationalization of the Framework for Sustainable Agricultural Mechanization in Africa (F-SAMA)

VIRTUAL WEBINAR No. 13 | Date: Monday, 22 July 2024 | Time: 15:30 – 17:00 hrs GMT

The Role of Sustainable Agricultural Mechanization in Scaling up the Adoption of Conservation Agriculture by Smallholder Farmers in Africa

Accumulated positive experience and scientific knowledge about Conservation Agriculture (CA) are leading to its rapid adoption worldwide. Farmers now apply CA on over 205 million hectares (15% of the world's annual cropland area) in over 100 countries across a diverse range of agroecological zones and farm sizes, in all continents. *It has enhanced farm production and reduced costs while conserving and enhancing the natural resources of land, water, biodiversity, and climate.* This value proposition aligns well in the context of mitigating increasing input costs prices (fertilizer, energy/fuel, and labour), and climate change challenges.

Conservation Agriculture is the largest existing model of climate-smart agriculture (CSA) worldwide in terms of surface area, with over 3.2 million hectares of annual cropland in Africa, about 1.5% of the global area under CA. The number of African countries opting to adopt CA as a core production component of climate-smart agriculture has increased exponentially, from 9 to 14 to 25 in 2008/09, 2013/14, and 2018/19 respectively. Likewise, the area under CA has also increased more than five-fold from 485,230 ha to 3.2 million ha over the ten years' period, 2008-2018. This achievement is still far below expectations and potential.

The ninth world congress on conservation agriculture (9WCCA) presents an opportunity for Africa to share best practices and strategies for scaling *CA* and learn from practical global research, international farming best practices, and the broader agricultural industry.

Adoption and practice of CA require appropriate and specialized tools, equipment, and implements that enable farmers to coherently implement the three principles of CA effectively. Minimum mechanical soil disturbance cannot be implemented without the right machinery. Thus, scale-appropriate CA-based sustainable agricultural mechanization is paramount to the spread and scaling of CA. Sustainable Agricultural Mechanization (SAM) in Africa is an urgent imperative and an indispensable pillar for attaining the *Malabo Declaration: Zero Hunger Vision by 2025, Goal 2 of the Sustainable Development Goals – and Agenda 2063, the Prosperous Africa We Want.* Doubling agricultural productivity and eliminating hunger and malnutrition in Africa will not be realized unless mechanization along the food value chain is accorded utmost priority.

Understanding this situation, the African Union Commission (AUC) and the Food and Agriculture Organization of the United Nations (FAO), through an Africa- wide consultative process, developed the Framework for Sustainable Agricultural Mechanization in Africa (F-SAMA) in response to the request of the African Union Specialized Technical Committee (STC) on Agriculture, Rural Development, Water and Environment. The F-SAMA, launched in 2018, has ten priority elements geared towards informing policy and decision-makers in the Member States, the Regional Economic Communities (RECs) in Africa, and the wider development community dealing with agricultural development on the signifi-

cance of mainstreaming SAM in their overall national and regional agricultural development programmes.

AfricaMechanize www.africamechanize.org is a SAM platform aiming to enhance knowledge management, information sharing, networking, and partnerships in Africa. The platform has been developed to support the AU and FAO to operationalize the F-SAMA initiative, with FAO providing technical support and the African Conservation Tillage Network (ACT) providing secretariat functions. The platform was developed following recommendations from the December 2016 stakeholders' consultative meeting co-organized by FAO, World Bank, AGRA, ACT, and others in Nairobi, Kenya. The need for an information platform for SAM in Africa is further reinforced in Element 10 of the F-SAMA as one key *option of sustainable institutions for regional cooperation and networking*.

From November 2020 to June 2024, twelve webinars were conducted with Directors of Agricultural Mechanization and Engineering Services [DAMES] and other stakeholders of SAM in Africa on the ten priority elements of F-SAMA and operationalizing the framework in Africa. The webinars attracted more than 1,837 participants and 75 speakers from over 75 countries globally (45 from Africa). The virtual discussions were conducted through the AfricaMechanize information platform and jointly organized by FAO, AUC, ACT and other key mechanization stakeholders in Africa.

The SAMA framework prioritizes farm power as the most limiting factor to SAM in Africa, thus our investment discussions need to take into consideration this pointer. SAMA appreciated that CA adoption is realized when the farm power problem is tackled, evident by the large-scale farmers in Africa who contribute two-thirds of the area under CA, while constituting less than one percent of the total number of farmers, due to their adequate farm power and appropriate mechanization.

Webinar 13, which is also a plenary session at the 9WCCA, intends to contribute solutions by bringing together experts, development partners, leaders, and stakeholders from various sectors to discuss the challenges and opportunities of SAM as an accelerator to the adoption of CA, and sustainable agriculture in general. The panellists will share their experiences and insights on how to address the mechanization challenges facing all categories of farmers in adopting CA practices and innovations, and the synergies and complementarities when effective links are formed between small, medium, and large-scale farmers.

The critical issues requiring dialogue for pinning strategic interventions include: What is constraining investments in CA & SAM in Africa? How do investments in CA & SAM compare to seeds, fertilizers, and agrochemicals over the years? What are the roles of long-term visioning, policies, and strategies? What sustainable institutions for collaboration and networking need to be created or strengthened at the national and regional levels? Among other things, what must be done differently this time to drive more or dedicated investments in CA and SAM in Africa for impact? The deliberations should identify best practices and recommendations for implementation of the F-SAMA beyond the 9WCCA.

This plenary session will enhance sharing and critical analysis of challenges and successes in operationalization of the F-SAMA, and the strategic role it harbours in scaling Conservation Agriculture. It will highlight knowledge gaps, and aims to developing an overarching roadmap for the operationalization of the F-SAMA in Africa for the next five years.

The **Objective of Webinar 13** is to accentuate the role of Sustainable Agricultural Mechanization in Scaling up the Adoption of Conservation Agriculture by smallholder and medium scale farmers in Africa, and devise a roadmap to operationalize the F-SAMA at national and sub regional levels.

The Expected Outputs of this webinar include:

i) *A dedicated newsletter* summarizing the key issues discussed and recommendations to heighten increased investments and support for CA and SAM.

ii) *Action plan* for realization of the identified priority interventions, towards increased investments and support for CA and SAM.

iii) *Summary paper of the proceedings of this webinar.*

The estimated **200 Participants** in Webinar 13 will be drawn mainly from private sector agricultural machinery manufacturers, farmers' organizations, not-for-profit organizations, Directors of Agricultural Mechanization and Engineering Services [DAMES] from all African countries, representatives of the Regional Economic Communities [RECs], AUC, FAO and the ACT Network.

The hybrid event will be held at the Cape Town International Convention Centre, South Africa, and simultaneously shared online from **15:30 – 17:00 hrs GMT on Monday 22nd July 2024**, using the Zoom communication tool, in both **English and French.**

AGENDA

Date: Monday, 22nd July 2024 | Time: 15:30 - 17:00 hrs GMT | Time: 17:30 hrs Cape Town

15:30	**Opening Remarks** • **Abebe Haile-Gabriel,** FAO Assistant Director-General & Regional Representative for Africa (RAF)
15:35	**Objectives of the Webinar** • **Saidi Mkomwa,** Executive Director, African Conservation Tillage Network (ACT)
15:40	**Retiring the Hand Hoe and the Call to Action to Member States, Private Sector and Development Partners** • **HE Amb. Josefa Sacko,** Commissioner for Agriculture, Rural Development, Blue Economy and Sustainable Environment (ARBE) of the African Union Commission
	Directions for Investments in sustainable agricultural mechanization with CA. • **Katie Kennedy Freeman,** Lead Economist, The World Bank.
	Conservation Agriculture on the move: A learning agenda through digital, mechanization and service models. • **Sieglinde Snapp,** Director, Sustainable Agrifood Systems Program, CIMMYT.
	CA & SAM synergy: Role of the medium scale farmers • **Geoffrey C. Mrema,** Professor - Agricultural Engineering, Sokoine University of Agriculture (SUA), and Technical Advisor, ACT Network.
	The futuristic perspective on operationalization of the F-SAMA; an FAO perspective • **Josef Kienzle,** Head, Sustainable Agricultural Mechanization Team, FAO Rome.
16:35	**Plenary discussion, Questions and answers, and Way forward discussions** • **Abebe Haile-Gabriel,** FAO ADG & Regional Representative for Africa (RAF)
17:00	**Closing** • **Abebe Haile-Gabriel,** FAO ADG & Regional Representative for Africa (RAF)

The hybrid in-person and virtual/webinar event series is organized by:

Food and Agriculture Organization of the United Nations (FAO)
www.fao.org.

The African Union
https://au.int/

African Conservation Tillage Network (ACT)
www.act-africa.org

The session will provide short keynote presentations followed by interactive discussions among participants. **Ensure your views are heard and considered in shaping the CA & SAM adaptation, adoption and scaling agenda by participating in the session. Registration is free but required** to participate in this webinar. **Register in advance** at the: **Registration Link.**

The webinars and discussion forums are being organized by the interim F-SAMA steering committee, comprised of AUC, FAO, and the ACT Network.

For more information, contact:

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- Josef Kienzle, Agricultural Engineer (Sustainable Mechanization). Leader of the Sustainable Agricultural Mechanization Group in the Plant Production and Protection Division (NSP) of FAO, Rome, Italy: (Email: Josef.Kienzle@fao.org);
- Saidi Mkomwa, Executive Director, African Conservation Tillage Network (ACT), Nairobi, Kenya. (Email: saidi.mkomwa@act-africa.org).