In August 2022, the Sasakawa Africa Association (SAA) organized two side-events at the Eighth Tokyo International Conference on African Development (TICAD8) under the themes: "Healthy soils for food security in Africa", and "Multidimensional digitally-enabled agricultural extension in Africa".

**Healthy soils for food security in Africa**

**Event overview and objectives**

This event was held on August 5, 2022, in collaboration with the Japan International Research Centre for Agricultural Sciences (JIRCAS). 330 people attended the session which was a platform for research and development communities to exchange their experiences and insights on regenerative agriculture (RA). The event focused on the technology portfolio and extension approaches suited to advance RA uptake by smallholder farmers in Africa. The event aimed to raise awareness on the critical importance of healthy soils for improving productivity and mitigating climate change.

**Field reports**

Dr. Fentahun Mengistu, SAA Ethiopia’s Country Director, and Dr. Kofi Boa the Executive Director of the Ghana-based Center for No-Till Agriculture, shared their field experience on regenerative agriculture. Dr. Fentahun recognized that Ethiopia was abound with opportunities for agricultural leadership and biodiversity conservation, however noted that the progress has for a long time been hampered by land degradation, soil related problems, biotic and abiotic factors, poor farming practices, and socio-economic difficulties. He went on to showcase the opportunities for transformation linked to the design of a unique RA strategy tailored for Ethiopia and Africa, which he said would not be primarily focused on the reduction of greenhouse gas emissions, but rather reduce environmental degradation, achieve resource use efficiency, increase productivity and reduce agriculture’s environmental footprint.

Dr. Boa’s presentation focused on local solutions for advancing conservation agriculture, through no-tillage and minimum tillage farming. Some of the strategies that Dr. Boa and his team have seen to yield great results, include the promotion of crop cover at the right densities, the use of mulch at the time of planting, the dissuasion of farmers from burning crop remnants, crop diversification (intercropping and crop rotation), alley cropping, retention of dispersed trees, furrow systems and contour planning. He further provided a three-phase strategy for RA adoption that starts with building the acceptance of farmers on the concept of conservation agriculture before moving on to provide evidence of success, and finally, giving them hands-on practical training.

**Key takeaway**

The event confirmed that SAA’s promotion of regenerative agriculture is important for increasing soil fertility and restoring degraded land. SAA will continue working with its different partners in promoting regenerative agriculture as a key component of food security and in driving Africa’s leadership in sustainable development and the fight against climate change.

**Keynote speakers**

**Prof. Rattan Lal**
Distinguished Professor of Soil Science and founder, and director of the Carbon Management and Sequestration Center at the Ohio State University.

Prof. Lal highlighted the importance of maintaining healthy soils and compensating farmers willing to make the transition to RA. He further called on policy makers, government officials and the private sector to take charge of incentivizing the farmers.

**Prof. Ken Giller**
Professor of Plant Production Systems at Wageningen University. Research expert in soil fertility and the role of nitrogen fixation in tropical legumes, with emphasis on the temporal and spatial dynamics of resources within crop/livestock farming systems and their interactions.

In his speech, Prof. Giller emphasized the importance of designing soil fertility management plans that are region-specific and driven by a clear understanding of the diversity of climatic, soil, and socioeconomic conditions in Africa.

**Speakers**

- Prof. Ruth Oniang'o, Chair SAA
- Mr. Osamu Koyama, President JIRCAS
- Dr. Fentahun Mengistu, SAA Ethiopia’s Country Director
- Dr. Kofi Boa, the Executive Director of the Ghana-based Center for No-Till Agriculture
- Dr. Leigh Winowiecki, Global Research Leader: Soil and Land Health / Co-lead: Coalition of Action 4 Soil Health (CA4SH), CIFOR-ICRAF
- Dr. Satoshi Nakamura, Project Leader, JIRCAS
- Dr. Miyuki Iiyama, Program Director, Information Program, JIRCAS
- Dr. Edmundo Barnios, Agricultural Officer, Plant Production and Protection Division, FAO
- Dr. Tilahun Amede, Head, Resilience, Climate & Soil Fertility, AGRA
- Dr. Sani Miko, Country Director, SAA Nigeria
- Dr. Makoto Kitanaka, President, SAA
Multidimensional digitally-enabled agricultural extension in Africa

Accelerating agricultural transformation in the face of global crises

Event overview and objectives

This event was held on August 26, 2022 in partnership with the International Food Policy Research Institute (IFPRI) and the African Forum for Agricultural Advisory Services (AFAAS). African smallholders face many risks in the face of climate change and other shocks. Digital tools are particularly important for extension, for decision-making and to connect diverse actors and facilitate access to input/output markets, improved technologies, information, finance, and private sector service provision. Thus, strengthening multidimensional and digitally-enabled agricultural extension will support resiliency of smallholder farmers in Africa. The symposium highlighted trends, good practices, recommendations and rose awareness for the importance of digital enhancements in agriculture.

Key discussions from the event

Dr. David Laborde, Senior Research Fellow at IFPRI, presented his latest analysis on critical food and the impact of fertilizer price increase on smallholder farmers in Africa. He found sub-Saharan Africa relies heavily on imports for the majority of its fertilizers, however high prices directly threaten food security in the region. Further, highlighted the importance of building effective extension services which deliver knowledge and skills on the efficient use of fertilizer, alternative farming methods and timely market information for smallholder farmers.

Dr. Kristin Davis, also a Senior Research Fellow at IFPRI, illustrated the approaches to pluralize and digitize agricultural extension services. She noted that governing structures, funding, organization and management, and clientele engagement effects the performance of agricultural extension services. Further, in order to increase investments in agriculture, governments and development partners need to cooperate more.

SAA’s Strategic Partnership Director, Dr. Mel Olouch, spoke of SAA’s experience in the digitalization of agricultural extension in Africa. He cited the mainstreaming of the e-extension platform in agricultural operations as critical for bridging the extension worker to farmer ratio.

Dr. Olouch noted: 1) Digital platforms can help reduce the cost of extension at farm level, and 2) Strengthening of e-Extension and e-Learning promotes access to agricultural extension for effective service delivery.

Dr. Bernard Vanlauwe, the Director of Research for Development at the Central Africa and Natural Resources Management of the International Institute for Tropical Agriculture (IITA), showcased the impact of his organization’s partnership with SAA in the development of locally-relevant innovations. He focused on Akilimo, an app that employs state-of-the-art analytics to provide site-specific recommendations optimizing productivity and profits for cassava growers in Nigeria. Over 10,000 smallholder cassava growers, 47% of whom are women, have registered.

Mr. Joseph Ebemba, the SAA-Uganda’s Deputy Country Director, showcased the One Stop Center Association (OSCA) model in digitally-enabled farmer-to-farmer service provision. He particularly focused on the use of the EzAgri app in profiling the members of the Zirobwe Agaliawamu Agri-business Training Association (ZAAATBA), and the application of WhatsApp in transacting business by the association’s members.

Throughout the event, speakers emphasized technology alone is not enough. It has to be supported by capacity-building, the involvement of different multi-dimensional stakeholders, including private and public actors, farmer organizations and other stakeholders.

Key takeaway

The session highlighted the importance of digital technologies in driving the access to agricultural extension services by Africa’s farmers – a critical element of the SAA’s ‘walking with the farmer’ strategy. SAA will continue to strengthen its partnerships with stakeholders along the agricultural value chain and increase the penetration of multidimensional extension services down to rural smallholder farmers to help improve adoption of agriculture technologies.