



13th African Crop Science Society Conference

Building Africa's Future: Crop Research and Innovation for Agricultural Transformation, Resilience, and Inclusion

16th – 19th September 2024

**Venue: Eduardo Modlane University Main Campus
Maputo, Mozambique**

Conference Concept Note

1. Introduction

The African Crop Science Society (ACSS) is organizing its 13th Conference that will be hosted by Eduardo Mondlane University in collaboration with the National Agriculture Research Institute (IIAM) and other higher education institutions in Mozambique. The conference shall be held from 16th to 19th of September 2024, in Maputo, Mozambique.

The Conference will provide a platform for sharing and discussing research results that bring solutions towards enhancing agricultural development in Africa. It is expected that more than 400 scientists and innovators, farmers, entrepreneurs and agribusinesses, educators and policy makers involved in agricultural related value chains from all over Africa will attend.

Much of Africa has experienced in recent years rapid agricultural and economic growth. At the same time, population growth and demographic change, rural-urban migration, and increasing access to information and communication, have transformed food demand and systems. In many countries, the domestic food market is becoming more attractive for farmers than traditional export cash crops and postharvest activities of the food economy, such as processing, logistics and retail, are developing quickly (FAO, 2016). In addition, a transformation is underway from a subsistence agriculture into one that is more commercialized and integrated into national and international value-chains driven by small and medium private sector enterprises (SMEs). These developments are creating new growth opportunities for Africa agriculture.

However, sustainable agricultural growth in Africa is challenged by several factors. Food insecurity and malnutrition remain a major concern across the continent and without action, will be exacerbated by high population growth. Stagnant and low productivity due to lack inputs remains one of the major challenges facing African agriculture, as increases in



production have mainly been the result of population increase and area expansion. The impact of climate change is another challenge facing agriculture in Africa. High rate of temperature increase on the continent is being paralleled with increased drought occurrence, higher in Africa compared to most other regions in the world. Unfortunately, Africa suffers disproportionately from climate change due to poverty and overreliance on rainfall. Africa has a young population, and family farming will remain the single largest source of employment in the coming decade (WB, 2016). Modernizing and making the agriculture sector attractive to young people is another important challenge facing African agriculture with a high potential impact on poverty reduction and agricultural growth (FAO, 2016).

These challenges require robust and dynamic innovations that target traditional agriculture and its stressful environments. Crop research and innovation is the backbone of sustainable agricultural growth, bringing new knowledge and practical solutions to the problems faced by farmers and entrepreneurs. African Crop Science Society (ACSS) offers one of the most positioned platforms for sharing of actions, innovations and other developments in crop science and production in Africa.

2. Objectives

The overall objective of the conference is to share the state-of-the-art knowledge and innovations along the most important crop value chains in Africa in a context challenged by climate change and other stressors.

At the conference, the latest results from crop science research & technology innovation will be presented and the way forward for achieving more resilient livelihood opportunities, increased food and nutrition security and agribusiness growth for economic and social development will be discussed.

The conference will also provide an opportunity to further enlighten both young and senior academics on key issues that threaten agricultural development on the continent.

3. Themes

The overall theme of the Conference **“Building Africa’s Future” - Crop Research and Innovation for Agricultural Transformation, Resilience and Inclusion**, expresses the broad range of opportunities and challenges facing African agriculture today that will be addressed during the conference. Research results, innovations and practical solutions across several disciplines, from plant breeding and crop management practices for increased productivity and climate resilience to commodity value chain analysis, technology adoption and inclusion of youth and women, will be shared and discussed.

The conference will focus on the contribution of crop research and innovation to agricultural transformation in Africa across 3 main pillars:



- ✚ **Theme 1. Agricultural production systems** for a sustainable, viable and efficient production from planting to processing, marketing and consumption.

Topics:

- ❖ Plant breeding, biotechnology and seed systems.
- ❖ Food systems and nutritional security.
- ❖ Agro-processing.
- ❖ Modern production systems and technologies (digital agriculture, mechanization).
- ❖ Crops for clean energy.
- ❖ Under researched and emergent crops.

- ✚ **Theme 2. Resilience** for reduced impact of climate change, natural hazards and climate-related disasters.

Topics:

- ❖ Breeding for climate stress-tolerant varieties.
- ❖ Climate change and agricultural systems resilience.
- ❖ Soil health, fertility and management.
- ❖ Sustainable and regenerative agriculture.
- ❖ Crop protection, integrated pest management and biosafety.
- ❖ Water management.

- ✚ **Theme 3. Inclusion** for market involvement of women and youth in agriculture.

Topics:

- ❖ Agribusiness, entrepreneurship and inclusive market systems.
- ❖ Smallholder farming and marketing inclusion.
- ❖ Gender inclusive approaches for technology adoption and financial literacy.
- ❖ Gender inclusivity on access to resources, training and market opportunities.
- ❖ Youth engagement in agriculture.
- ❖ Agricultural knowledge systems.
- ❖ Policies for agricultural transformation.

4. Format and program highlights

To accomplish its goal the Conference will facilitate a learning, dynamic and interactive environment where opportunities will be created for researchers, innovators, farmers, private entrepreneurs, academics, students and policy makers to share research and innovation results and to discuss strategy recommendations around the themes of the Conference.

The conference will combine the traditional conference in-person experience with online participation where both group of attendees can interact with each other.

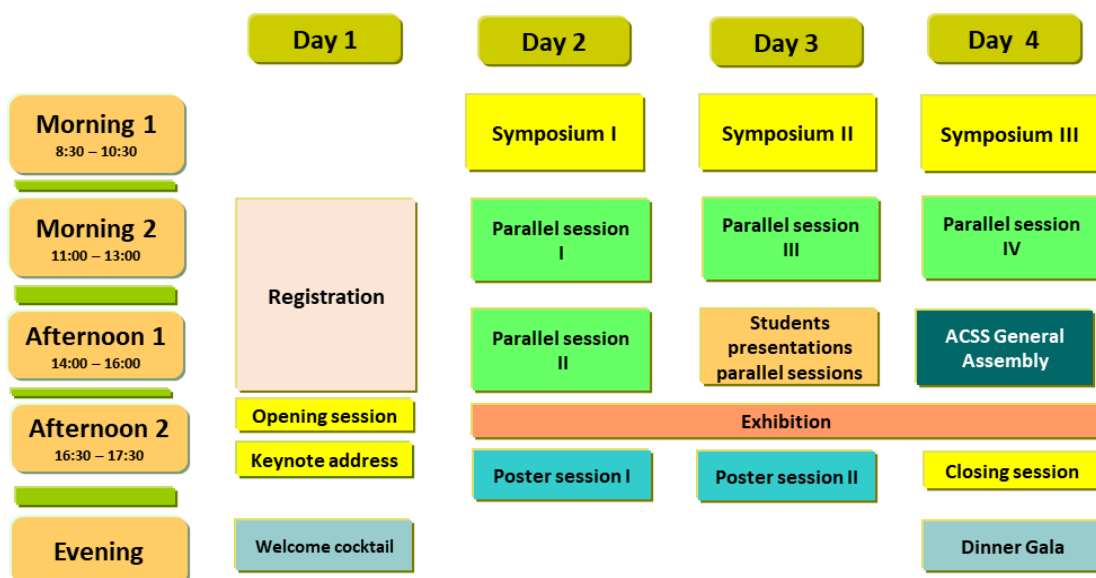
The conference will consist of a 3-and-a-half-day program of events, which will include:

- ❖ **Symposia** where experts will be invited to present their insights and experiences on how agricultural science and innovation can contribute to facing the main agriculture challenges. Experts' presentations will be followed by a panel discussion in a plenary session.



- ❖ **Workshops and side events** where a structured and interactive environment will be created to share results experiences around a specific theme and discuss strategies and ways forward to improve research and innovation outputs. Two or three oral presentations may be included.
- ❖ **Thematic scientific sessions** where researchers will present their latest results in their specific field.
- ❖ **Students' presentations sessions** (quick posters presentations 5-7 minutes) where MSc and PhD students will orally present a summary or highlights of their research projects results.
- ❖ **Posters sessions** where participants will illustrate their work using a poster pinned to a poster board. Presenters will engage with interested participants on a one-to-one basis, providing opportunities for networking, discussion and relationship building.
- ❖ **Exhibitions** where farmers, agribusinesses, education and research institutions will present products and information related to their businesses. Interested participants engage with on a one-to-one basis with each exhibitor.
- ❖ **Short courses** for students and interested participants will be organized by demand.

Conference Tentative Program





5. Organizers

The ACSS, the only one of its kind in Africa, was created in 1993, by a group of African scientists that felt that there was a strong need to establish a professional society dedicated to the advancement of crop production for the improvement of food security in Africa. ACSS, through its organized platforms (such as the African Crop Science Journal and conferences) facilitates information sharing, communication, and dissemination of research results from of relevant and high-quality research, to foster innovation and African researchers' professional development. From the first ACSS conference held in 1993, twelve (12) African Crop Science Conferences have been held in 8 different African countries (Uganda, Malawi, South Africa, Morocco, Nigeria, Kenya, Egypt and Mozambique). Over the years, the conferences were characterized by significant increases in the number of participants, broadness and relevance of thematic discussions, as well as the scientific value of papers and posters.

Eduardo Mondlane University (UEM), the ACSS 2024 conference's host institution, is the oldest higher education public institution in Mozambique, founded in 1962. After Mozambique's independence, on May 1st, 1976, president Samora Moisés Machel named the university Eduardo Mondlane University, in honor of the relevant historical role played in Mozambique by Dr. Eduardo Chivambo Mondlane. Currently UEM has 11 faculties, including the Faculty of Agronomy and Forestry Engineering, 6 higher education schools, 1 institute and 2 center of excellence.

The Institute of Agriculture Research of Mozambique (IIAM) is the only public national agricultural research organization in the country subordinated to the Ministry of Agriculture and Rural Development (MADER. IIAM generates knowledge and technological solutions for the sustainable development of agriculture production, sustainable use of natural resources, agribusiness and food and nutrition security. IIAM brings together several areas of agriculture research (agronomy, breeding, crop production, forestry and animal sciences, rural sociology, agro-economics and agribusiness).

Higher Polytechnic Institute of Gaza and The Higher Polytechnic Institute of Manica are 2 higher education institutions located in the South and Center of Mozambique with a mission to promote the economic and social development of local communities, the region and the country, through technical-vocational education, economy-oriented education, business incubation, as well as the provision of professional services. They offer several BSc and MSc courses in agriculture and carry out research, extension and business incubation activities.

6. Venue

The conference will take place at Eduardo Mondlane University main campus in Maputo City.

Maputo is the capital and largest city of Mozambique. It is located in the south of the country and is inhabited by nearly one million people. Maputo features a warm and humid summer, with a rainy season lasting from November through March and a cooler and dry winter from June to August. It is a busy city, full of multicultural and entertaining life, seaside restaurants and hotels, offering international food and typical local dishes. The city is an easy and convenient place, with international daily flights to South Africa, and regular flights to Angola, Zimbabwe, Tanzania, Ethiopia, Qatar and Kenya.



7. Registration fees

In USD

Type of participation	Early registration			Late registration		
	ACSS member	Non ACSS member	Student	ACSS member	Non ACSS member	Student
In-person	250	350	50	300	400	75
Virtual	100	200	30	150	250	40

The in-person fee includes a conference bag, welcome function and coffee breaks.

8. Key deadlines

Pre-Announcement of the Conference	6 th December 2023
1st Announcement	15 th January 2024
2nd Announcement	15 th April 2024
Abstract submission:	30 th April 2024
Special sessions (workshops, side events, short courses) submission:	31 st March 2024
Exhibitors' registration:	31 st May 2024
Early registration:	31 st May to 31 st July 2024
Late registration:	1 st August to 17 th September 2024

9. Local Organizing Committee (LOC)

LOC Chair person: Dr. Amélia Sidumo

ACSS President: Dr. Luísa Santos

Secretariat: Mr. Cremildo Chiconela and Mrs. Kiara Dimande

Address: Faculty of Agronomy and Forestry Engineering, Eduardo Mondlane University. Maputo Mozambique

Email: acss2024@uem.mz

Phone: + 258 86 780 0264

Webpage: <https://acss2024.uem.mz>