19TH RUFORUM ANNUAL GENERAL MEETING (AGM)

AFRICA'S NEW HARVEST: PREPARING AFRICA'S AGRICULTURE AND RELATED SECTORS TO FEED AND GROW THE CONTINENT'S ECONOMY

Date: 31st October 2023 (11:00-13:00 GMT+1)

Venue: The Tripartite Room, Palais de Congrès, Yaoundé, Cameroon

Registration Link: https://bit.ly/44d1Txi

Concept Note Scientific Session Two

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BACKGROUND

Agriculture plays a key role in Africa's economy accounting for about a third of the African Continent's Gross Domestic Product (GDP), is a source of livelihoods for about half of the population and feeds hundreds of millions of people on the continent and beyond every day. According to the African Development Bank[1], the low productivity of Africa's agricultural sector makes it uncompetitive, with major producer agro-ecologies having high rates of poverty, subjecting 232 million people to undernourishment. Previous studies show that, gross domestic product (GDP) growth originating from agriculture productivity improvement, catalyses up to 40% more income growth among the poorest and is three times larger than growth originating from the rest of the economy[2]. To achieve the Sustainable Development Goals (1, 2, 3, 4, 5, and 12), increasing agricultural productivity is essential. Agricultural growth is a foundation for equitable and sustainable growth, because as it also supports food systems that produce nutritious, safe and affordable food. Additionally, considering that the agriculture employs over 60% of rural African populations, including smallholder farmers, it must expand in order to create jobs and unlock opportunity for millions of Africans. Growth however must be sustainable and well-integrated into the broader economy and major agrifood systems. This thematic area cover the following sub-themes:

a. Regenerative agriculture[3]
Africa has 60% of the worlds' remaining land for increasing agriculture productivity. While productivity increased mostly due to expansion of acreage, total factor productivity is reported at the 1960's levels when the

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[1] AfDB, 2016. Feed Africa. Strategy for agricultural transformation in Africa 2016–2025. African Development Bank, Abijan, Côte d'Ivoire

[2] Christiaensen, L. and Martin, W. 2018. Agriculture, structural transformation and poverty reduction: Eight new insights. World Development, 109: 413-416. doi.org/10.1016/j.worlddev.2018.05.027.

[3] Regenerative agriculture is an evolution of conventional agriculture, reducing the use of water and other inputs, and preventing land degradation and deforestation. It protects and improves soil, biodiversity, climate resilience and water resources while making farming more productive and profitable. www.syngentagroup.com/en/regenerative-agriculture#bookmark1

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population was 257 million compared to 1.4 billion in 2022. With the potential threat of a shrinking cereal production under the predicted climate change scenarios, Africa must farm smartly. This sub-theme focuses on the following topical areas:

    a) Agro-ecology and sustainable intensification;

    b) Soil health, water, energy and environment; and

    c) Advanced genetics for production; with specific focus on i) Crop improvement: new resilient demand-driven crop varieties/new species and ii) Livestock improvement: new resilient demand-driven livestock breeds/species

b. Reducing food losses, evening food supply and creating market opportunities for Africa's food systems

Africa imports annually food worth 40 billion USD annually but also exports food worth about 35 billion USD according to Brookings Institute[4]. These imports fill the vast calorie needs created by the low productivity, and post-harvest loses that can be up to 37%, with cereals accounting for up to 21% according to FAO. As Africa's population grows and gets richer, the demand for food, especially high-value crops and livestock products, will continue to grow. The African development Bank estimates that Africa's processed, food and beverage markets currently worth US$ 313 billion will reach US$ 1 trillion by 2030. This will create jobs and unlock opportunity for reducing hunger, and integrating African farmers and entrepreneurs into Africa's growing urban and modern markets. African Universities must be part of the ongoing revolution that will create new opportunity for Africa to prosper, while improving food and nutrition security. This sub-thematic area focuses on the following:

    a) Food processing for Africa's growing and urbanizing populations

    b) The nutrition challenge (Under nutrition, over nutrition, food safety and health)

    c) Policies: Taking stock of progress made against key food systems continental supportive policies (Trade, UN Food System summit of 2021 etc.)

    d) Shrinking supply chain gaps using digital and financial solutions

c. Africa's Blue Economy[5]: Sustainable marine and fresh water exploitation

Africa's future economic and sustainable development may be fueled by its blue economy if it is managed in a sustainable manner. According to African Union, marine capture fisheries currently stands at 7 million tons and will only reach 13 million tons by 2030, leaving a supply gap of 6 million tons by 2030[6]. Fresh water fisheries the largest sector of Africa's blue economy, employs nearly 12 million people. Over 200 million Africans depend on these aquatic resources for food security and the sector generates an estimated value added of more than $24 billion, or 1.26% of the GDP of all African countries7. Given the gap in supply of fish and the overall potential of other sectors of the blue economy (currently valued at US$300 billion and, creating 49 million jobs), it is imperative that strategic studies be undertaken to inform policy, investments and sustainable management. This sub-theme is specifically focusing on:

    a) Aquaculture:

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[4] Fox L. and T.S. Jayne 2020. Unpacking the misconceptions about Africa's food imports. https://www.brookings.edu/blog/africa-in-focus/2020/12/14/unpacking-the-misconceptions-about-africas-food-imports/

[5] The Blue Economy refers to sustainable use and conservation of aquatic resources in both marine and freshwater environments. It includes oceans and seas, coastlines and banks, lakes, rivers and groundwater. It also includes economic benefits that may not be marketed, such as carbon storage, coastal protection, cultural values and biodiversity

[6] https://www.afdb.org/en/documents/future-marine-fisheries-african-blue-economy

b) Marine resources of food and fiber.
c) Conservation of both aquatic and marine biodiversity, and sustainable strategies for ecosystem services.

OBJECTIVES

The main aim of this scientific session is to foster the exchange of knowledge, promote collaboration, and advance the understanding and practice of agriculture within the scientific community. Specifically this session will:

a. Foster networking opportunities, bringing together researchers, professionals, and practitioners from diverse backgrounds and institutions
b. Enhance the professional development of attendees by providing insights into emerging trends, methodologies, and best practices within their field of agriculture.
c. Facilitate interactions between researchers and industry professionals, fostering collaboration, technology transfer, and application of research findings in real-world contexts.
d. provide a platform to discuss policy implications, societal impact, and ethical considerations of research findings

APPROACH

The event will start with a plenary session where all conference participants will gather to listen to a keynote speaker who will be followed by a responded to his/her presentation. This session will set the tone for the conference, provide an overview of the theme, and inspire attendees with insightful talks and presentations. Thereafter will break out into three parallel sessions running concurrently, each focusing on a specific topic or sub-theme. Participants will choose the sessions that align with their interests and attend presentations and panel discussions related to their specific areas of interest.

EXPECTED OUTCOMES

a. Advancement of knowledge within the specific fields under this thematic area
b. Establishment of new connections, building of relationships, and fostering potential collaborations for future research projects, joint publications, and interdisciplinary initiatives.
c. Motivation and inspiration of participants to continue their research endeavors, explore new areas of study, and contribute to the advancement of knowledge in their respective fields
d. Contribution to evidence-based policymaking, shape regulations, and guide future actions in relevant areas

PARTICIPANTS

Participants will include researchers, scientists, academics, development partners, policy makers and Government Officials, industry representatives, Non-Profit Organizations, professionals, and graduate students.

Co-organized by:

ORGANIZERS

The event is organized RUFORUM, with support from the Government of Cameroon and RUFORUM member universities in Cameroon.

PROGRAMME

TUESDAY 31st October, 2023		
PLENNARY SESSION 1 **VENUE: The Tripartite Room** **Registration Link: https://bit.ly/44d1Txi** **CHAIR**: Prof. Ernest Molua, Deputy Vice Chancellor, University of Bamenda, Cameroon **RAPPORTEUR**: Waswa[7] Moses, Emmanuel Okalany[7] and Selma Ndapewa Nghituwamhata		
Time		
11:00-11:05	**WELCOME REMARKS FROM THE CHAIR** Prof. Ernest Molua, Deputy Vice Chancellor, University of Bamenda, Cameroon	
11:05-11:20	**Key Note Address** **Title: Preparing Africa's agriculture and related sectors to feed and grow the continent's economy** Dr. Job Kihara, Excellence in Agronomy, CGIAR	
11:20-11:30	**Respondent** Dr. Aggrey Agumya, Executive Director, FARA	
BREAKOUT SESSIONS		
Session 1: REGENERATIVE AGRICULTURE **VENUE: The Tripartite Room** **Registration Link: https://bit.ly/3KHLTMU** **CHAIR**: Dr. Mildred Kathryn Nyaburu Ssemakula, College of Agricultural and Environmental Sciences, Makerere University, Uganda **RAPPORTEUR**: Waswa[7] Moses, Emmanuel Okalany[7] and TBC-Cameroon		
11:30 – 12:35	**Keynote Speaker:** Prof. Rattan Lal, Distinguished Professor of Soil Science, Ohio State University, USA **Panelist 1:** Agro-ecology and sustainable intensification Dr. Regis Chikowo, Systems Agronomist, University of Zimbabwe, Zimbabwe **Panelist 2:** Soil health, water, energy and environment	

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[7] All issues regarding rapporteuring should be addressed to Waswa and Okalany

	Prof. Jan Hoinkis, Kalshure University of Applied Sciences, Germany	
	Panelist 3: Advanced genetics for production Prof Tongoona Pangirayi, West Africa Centre for Crop Improvement, Ghana	
	Panelist 4: Invasive Species and their management Dr Lakpo Koku Agboyi, CABI, Kenya	
	Panelist 5: Livestock improvement: New resilient demand-driven livestock breeds/species Prof Jan Swanepoel, University of the Free State, South Africa	
12:35-12:55	**Discussion**	
12:55-13:00	**Closing remarks and take home message**	
Session 2: REDUCING FOOD LOSSES, EVENING FOOD SUPPLY AND CREATING MARKET OPPORTUNITIES FOR AFRICA'S FOOD SYSTEMS **VENUE: Complex A** **CHAIR**: Prof. Bobe Bedadi, Haramaya University, Ethiopia **RAPPORTEUR**: Waswa[8] Moses, Emmanuel Okalany[8] , Napoleon Kajunju and Cameroon-TBC		
11:30 – 12:35	**Keynote Speaker:** Reducing food losses, evening food supply and creating market opportunities for Africa's food systems. Prof. Umezuruike Linus Opara, Stellenbosch University, South Africa **Panelist 1:** Food processing for Africa's growing and urbanizing populations Prof John Muyonga, Makerere University, Uganda **Panelist 2:** The nutrition challenge (Undernutrition, over nutrition, food safety and health) Prof Esther Ngah, University of Ngaoundere, Cameroon **Panelist 3:** Policies and markets: Taking stock of progress made against key food systems and continental supportive policies	

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	Professor Emeritus Kay Muir-Leresche, University of Zimbabwe, Zimbabwe **Panelist 4:** Shrinking supply chain gaps using digital and financial solutions Bouchaib Boulanouar, Senior Officer, Africa Initiative, Mohamed VI Polytechnic University, Morocco	
12:35-12:55	**Discussion**	
12:55-13:00	**Closing remarks and take home message**	

Session 3: AFRICA'S BLUE ECONOMY : SUSTAINABLE MARINE AND FRESH WATER EXPLOITATION
VENUE: Meeting Room E
Registration Link: **https://bit.ly/3DYusUI**
CHAIR: Prof. Ibisime Etela, University of Port Harcourt, Nigeria
RAPPORTEUR: Waswa[9] Moses, Emmanuel Okalany,[9] Selma Ndapewa Nghituwamhata and Cameroon-TBC

11:30 – 12:35	**Keynote Address:** Africa's Blue Economy : Sustainable Marine And Fresh Water Exploitation Prof. Emmanuel Kaunda, Vice Chancellor, Lilongwe University of Agriculture and Natural Resources, Malawi **Panelist 1:** Aquaculture: Dr. Eric Ogelo, Maseno University, Kenya **Panelist 2:** Marine resources of food and fibre Dr. Hilkka Ndjaula, University of Namibia, Namibia **Panelist 3:** Conservation of both aquatic and marine biodiversity, and sustainable strategies for ecosystem services Prof. Harvey Bootsma, School of Freshwater Sciences, University of Wisconsin-Milwaukee, USA	
12:35-12:55	**Discussion**	
12:55-13:00	**Closing remarks and take home message**	

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