THE SEVENTH AFRICA HIGHER EDUCATION WEEK AND RUFORUM TRIENNIAL CONFERENCE,  
06 – 10 December 2021

Theme: Operationalising Higher Education for Innovation, Industrialisation and Economic Development in Africa: A Call for Action

Venue: Palais des Congres de Cotonou, Benin

Call for Conference Papers and Communications

Background

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) is a network of 128 universities in 38 African countries. It was established in 2004 to (i) foster integration of African universities into the national agricultural innovation systems (NAIS); (ii) provide a platform for training quality graduates to support development processes in Africa; (iii) rationalize resource use and enhance economies of scale and scope; and (iv) provide a platform for networking, resource mobilization and advocacy for agricultural higher education in Africa. RUFORUM envisions ‘vibrant, transformative universities to catalyze sustainable, inclusive agricultural development to feed and create prosperity for Africa’. The Seventh Africa Higher Education Week and First RUFORUM Triennial Conference will be held 6th-10th December 2021 in Cotonou, Benin, under the theme “Operationalising Higher Education for Innovation, Industrialisation and Economic Development in Africa: A Call for Action”. The five-day conference will bring together over 1000 participants such as policy makers including Ministers and Government Technical Experts, Higher Education Leaders in Africa, development partners, private sector, researchers, innovators, students, and farmer organisations, among others. The Triennial Conference and related events will be co-hosted by the Government of Benin through the Ministry of Higher education and Scientific Research, University of Abomey-Calavi, the University of Parakou, National University of Agriculture and RUFORUM Network.

As part of strengthening dissemination of research outputs and lesson sharing, RUFORUM invites interested authors (Researchers and scientists from national, regional and international research institutes, Higher Education stakeholders and beneficiaries of RUFORUM supported projects, including postgraduates students and their supervisors and development practitioners) to submit Research Application Summaries (Papers) of each maximum 10 Pages following the RUFORUM Working Document Series Guidelines and format. Papers on other topical issues, including development practice, will also be considered. The deadline for submission is 30th June 2021. Papers should be submitted
through triennialpapers@ruforum.org. All submissions will be scanned for originality through the anti-plagiarism software, peer reviewed and published as open access resource materials with a serialized RUFORUM Working Document Series (ISSN: 1993-8462) which will be made available to various stakeholders through the RUFORUM Institutional Repository (https://repository.ruforum.org/).

The RUFORUM Working Document Series is published in French and English. Therefore, authors are requested to submit papers in either English or French. For inquiries about your submission, please contact us through triennialpapers@ruforum.org. The papers will be published in a series of issues with the first anticipated publication date for accepted papers being 31st March 2021.

Thematic areas
As part of the proceedings of the RUFORUM Triennial Conference, we invite interested individuals to submit papers for presentation orally or as posters focusing on the application of biological, ecological and social knowledge to the development of agri-food systems including livestock production, food and nutritional security and environmental resources management. We also encourage communication between professionals and scientists who share a common interest in digital innovations, data management, economics, policy analysis, and experiences from education and research institutions-community engagement. Please note that we will follow a peer-review process to ensure quality and international interest of the submissions. The following thematic areas will be addressed:

1. Enhancing agri-food systems productivity
Agriculture has remained the pillar of most sub-Saharan African economies, employing more than 60% of the African population and provides material and economic resources for its people. In African countries, the agriculture sector contributes to gross development product and export. Despite its vital importance for reducing rural poverty and increasing social equality, the agri-food system sector in Africa countries is facing considerable challenges, among which is poor productivity, low quality inputs, adverse drought and climate effects, and rapid population growth. The projections by 2050 suggest that more than 50% of the increase in the world population will come from Africa. In this context, innovative agricultural research outputs will be important to contribute to meet the increasing needs in terms of food supply and nutrition security. In particular, we will welcome submissions in the categories of reviews, research and opinions that deal with (and not limited to) (i) agronomic practices, environment, sociology, integrated pests and disease management; (ii) post-harvest management, value addition and marketing; (iii) invasive pests and crop diseases in Africa; (iv) biosafety, bioethics and bio-risk management; (v) agriculture and health interface; (vi) nexus approaches for food value chains and transforming agri-food systems; (vii) application of nuclear science in agriculture; and (viii) precision agriculture and robotics.
2. **Strengthening livestock production systems**

In areas of intense drought and where lands are arid, livelihoods of smallholders farmers are sustained though livestock keeping. However, the dynamics of dryland areas in the face of unpredictable climate effects, the inadequate animal production systems, low quality inputs, animal pests and parasites, transboundary and zoonotic diseases are considerable challenges infringing on productivity of livestock production systems in Sub Saharan Africa. This thematic area calls for papers that explore (i) animal genetic resources, (ii) intensive and extensive animal production systems, (iii) feed and feed resources, (iv) energy coupling of livestock resources, (v) animal pests, parasites, transboundary and zoonotic diseases in Africa;

3. **Improving food and nutritional security**

Food security remains a critical and most debated issue, not only by virtue of being the second UN SDG goal, but also by the fact that it is increasingly affecting livelihoods, resilience and hope for the future generation. One the 2030 SDG Target is to halve the number of stunted children, however, currently more than 820 million people in the world are still hungry today, underscoring the immense challenge of achieving food and nutritional security. In this thematic area, we seek to address the challenges of achieving food security and the constraining aspects of food production and healthy diets. In particular, we will welcome research and opinion papers beyond agri-food systems targeting (i) policies and priorities to ensure food and nutritional security; (ii) approaches that improve food and nutritional security, (iii) food nutritional quality, food fortification and food safety, and (iv) biosafety, bioethics and bio-risk management.

4. **Sustainable water and environmental resources management**

Environmental and water resources have a central place in most political debates, as they sustain most services that contribute to enhance human life. However, industrialization and the need to feed the increasing number of people on earth have resulted in unsustainable and wasteful use of the resources. Sub-Saharan African countries are not immune to the negative impacts of misuse of natural resources, the greenhouse gas emission and deforestation that result from overexploitation of forest resources, agricultural intensification and wasteful relocation of lands. In this thematic area, we seek for research, review and opinions papers that cover issues affecting Africa’s (i) agro-biodiversity; (ii) resilience to climate change and extreme natural hazards; (iii) agricultural greenhouses gases and Climate Change, (iv) innovations and advances in soil fertility and soil health systems, and (v) integrated soil and water resource management practices. Further, interest is sought from articles that seek to address i) how disasters, hazards, crisis, and emergencies such as COVID-19 Pandemic and the global environmental change such as climate change affect the continuity and sustainability of families,
5. **Use of digital innovations, data management, economic and policy analysis**

Digital solutions and data management play a critical role in the transformation and promotion of inclusive growth of many developing countries, as they are projected to bring knowledge and skills to solve problems and evaluate evidence to make decisions. Digital innovations have also been shown to have a central role in the 4th industrial revolution and modernization of smallholder agriculture. Substantial efforts have been made in recent years to increase use of digital innovations in agriculture. Further, the recent COVID-19 pandemic has exposed African universities and governments to high vulnerability of uncertainty in the future of higher education. While some universities have partially migrated to online teaching, many others are still struggling with online education and student access to learning. This thematic area seeks articles, opinion papers and review papers on (i) digitalization of higher education systems, including blended learning for improving access to education, (ii) digitalization of agricultural extension systems, (iii) foresight, data and knowledge management, (v) 4IR and modernising smallholder agriculture; (vi) decision support system to guide future planning, as well as business models for economic growth; and (vii) agricultural policy analysis.

6. **Upscaling impact of University and community connectedness**

Universities have a critical role to play in community transformation through technology and knowledge transfer. However, at the present, only few universities in Sub-Saharan Africa strive to work closely with communities through long term engagement of their students and farmers. For instance, the Regional Universities Forum for Capacity building in Agriculture, in partnership with the MasterCard Foundation, and two universities in East Africa, notably Gulu University and Egerton University, are implementing a new model of agricultural education that links universities to rural communities, with emphasis on small farming communities. For large scale impact on the African continent, it is necessary to lesson learn and share experiences on the different engagement mechanisms. This thematic area seeks to focus on sharing information and facilitate exchange on the impact of University and community connectedness across the continent. In particular, we will welcome submission that focuses on (i) trade-offs in agricultural expansion; (ii) community action research; (iii) field attachments mechanisms; and (iv) university-community engagement (eg. traditional extension, student extension delivery services or placement/internship)

7. **Entrepreneurship and youth employability**

Africa has the world’s youngest population with about 60% of it being under 35 years old, of which 420 million are aged between 15 and 35. Between 2000 and 2008, Africa’s working age population (15-64
years) grew from 443 million to 550 million, indicating an increase of 25% and an annual growth of 2.7% per year (World Bank, 2011). By 2040, the continent’s labour force is expected to reach 1 billion making it the largest continent in the world, surpassing China and India. Africa's expanding youth population is often seen as challenge for youth development and employment but potentially, represents a promising driving force for Africa growth and development. However, this is only possible if youth in Africa can efficiently take advantage of existing opportunities, and become the engine of new agriculture and agribusiness enterprises driving the transformation on the continent. Innovation, entrepreneurship and agribusiness are promising opportunity outlets for youth in Africa, but most African countries are still facing many challenges related to institutional, human and youth development, limiting the opportunities to harness the Africa youth bulge. In this thematic area, we welcome submissions that cover (i) challenges for youth entrepreneurship and employability; (ii) agribusiness and product development; (iii) business financing, incubation and enterprise development (iv) commercialisation and market analysis, as well as (v) enabling policies for youth entrepreneurship and employability.

For any further information you may require, please contact:

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