

Statement by Africa's Universities Vice Chancellors to the UN Food Systems Summit 2021

We the Vice Chancellors of the 129 African universities that make up the RUFORUM Network are committed to supporting the African Union Commission (AUC) and national governments in identifying and implementing continental game changers that can transform agri-food systems for the benefit of our countries and people. In this endeavor, we commit to working together with national, regional and international partners from the public and private sector and civil society to improve the quality of higher education, research and innovation to building capability and facilitating equitable access to knowledge and skills. In so doing, we seek to ensure that “No-one is left behind” on the Continent.

Higher education is acknowledged as one of the greatest equalizers given its potential for transformational change to lift millions out of poverty. The 2020 COVID-19 global pandemic has disrupted the efforts of universities, which had been making progress in the last two decades, for assuring African societies that higher education can contribute to equitable development and social and economic progress. African universities have had to pivot to delivering online programmes under very challenging circumstances and this will impact future generations of African academics, entrepreneurs, farmers, professionals, and researchers especially women and youth. The informal sector has borne the brunt of the economic fallout due to mitigating measures including national lockdowns. The attainment of the 2030 Sustainable Development Goals (SDGs) on the continent has been further compromised.

The mission of the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), comprising the consortium of 129 African universities, operating in 38 countries is to:

‘strengthen the capacities of Universities to foster innovations responsive to demands of smallholder farmers through the training of high-quality researchers, the output of impact-oriented research and the maintenance of collaborative working relations among researchers, farmers, and national agricultural research institutions’

Since its creation in 2004, RUFORUM has provided a platform for networking, resource mobilization, advocacy on inclusive sustainable development, rational use of resources to enhance economies of scale and scope of African universities, ensuring that they remain relevant and directly support Africa's development priorities. RUFORUM builds on the shared collective voice enshrined in the African Universities' 2030 Agenda for Agricultural Higher Education, Science, Technology and Innovation (AHESTI), and the African Union Agenda 2063. RUFORUM member universities also support the full realization of the ambitious goals of several continental frameworks; specifically, the Comprehensive African Agricultural Development Programme (CAADP) and the Science, Technology and Innovation Strategy for Africa (STISA).

RUFORUM Vice Chancellors acknowledge that the future transformation of Africa's food systems requires innovative scientific, research, educational and training approaches. We unanimously agree that Africa's universities must be actively engaged in this transformation process. COVID-19 has reinforced and renewed our commitment. We agree to act with greater urgency for pioneering new approaches in delivering our collaborative regional education, training, research and innovation programmes for greater development impact.

In defining new pathways, we shall build on and integrate lessons from successful initiatives. For example, we have produced some of the finest plant breeders in Africa who have developed a wide range of improved varieties; cereals, legumes, roots and tubers that are already transforming agri-food systems on the continent. Building on Africa's indigenous genetic diversity, for developing new and improved plant varieties and livestock that are nutrient dense, affordable and climate resilient; and expanding commercial opportunities for smallholders and sustaining livelihoods of especially rural communities, is a priority for our universities in support of food systems transformation in Africa going forward.

The PhD programme in Dryland Resources Management is another example which is producing top notch researchers who are focused on building resilience in smallholder farming systems in arid and semi-arid areas and leading response and emergency assistance. Our university programmes that focus on climate change adaptation and mitigation, increasing water use efficiency and ensuring the sustainability of Africa's natural resource base, i.e., land, water and biodiversity remain a priority for food systems transformation in Africa going forward.

Our collaborative efforts have also been instrumental in re-launching education, training and research programmes in universities and research centers in conflict and post-conflict

countries such as Burundi, Democratic Republic of Congo, Liberia, Madagascar, Mali, Rwanda, Somalia, South Sudan, Sudan, and Zimbabwe. A critical pool of experts is now available and supporting the agri-food transformation in their home countries. Building capacity especially in post-conflict countries will continue to be a priority for African universities in support of food systems transformation in Africa going forward, thereby ensuring “No-one is left behind.”

We are also proud that alumni who have received grants through RUFORUM scholarship programmes remain (97% retention) on the continent to champion and lead agricultural research and innovation processes. They contribute to reshaping the policy and institutional framework and boosting agri-food systems performance, unlocking pathways out of poverty for smallholder farmers, livestock keepers, fishers and agro-based small and medium enterprises (SMEs), especially for women and youth who are at the centre of our shared RUFORUM agenda for food systems transformation in Africa going forward.

Food Systems Transformation in Africa: Entry points for universities

We recognize the four typologies that characterize Africa’s food system and are cognizant that inherent structural differences and the continent’s openness to international trade and high reliance on imported foods must be considered when identifying UNFSS game changers. The Africa agriculture 2020 report¹ demonstrates that African cities are among the largest agricultural markets world-wide, with an estimated value of US\$200 to US\$250 billion in food sales per annum; over 80% is sourced from suppliers in Africa. Increasing urbanization offers a burgeoning market to the 60 million farms in the continent. However, high poverty, hunger and malnutrition especially among rural households persist. Child stunting (< 5 years), micronutrient deficiencies, and increasing rates of overweight, obesity and non-communicable diseases must be comprehensively addressed². Africa’s food systems transformation post COVID-19 must be inclusive and provide equitable opportunities for all. The governance and financial arrangements at country and international level including the World Trade Organization and World Bank, must be factored into shaping the food systems transformation agenda In Africa.

RUFORUM Vice-Chancellors agree that the strategies, priority actions and targets for monitoring and evaluating progress in food systems transformation in Africa must be co-designed and co-owned by African universities working in partnership with local, national and international partners and civil society, while keeping in mind the ambitions of governments. All citizens must benefit especially smallholder producers, fishers, livestock keepers, SMES, rural communities, women and youth. Geographic isolation, gender, and other inequalities

¹ AGRA 2020. Africa Agriculture Report, Nairobi-Kenya.

² IFPRI, 2020. National food systems: Inclusive transformation for healthier diets. <https://www.ifpri.org/publication/national-food-systems-inclusive-transformation-healthier-diets>

including lack of modern infrastructure that limit access to knowledge, technology, finance and markets, and hinder development must be comprehensively addressed.

In this regard, RUFORUM will use its convening power, vast multi-disciplinary expertise, cross-sectoral platforms, and knowledge of the political, environmental and cultural context to leverage the interconnectedness of the Africa-wide food systems transformation agenda. To this end, for actions to support the 2021 UNFSS process to achieve successful outcomes, we specifically propose efforts towards:

- (1) Mobilize resources for continental initiatives that support human capital development that increase Africa's capability in research, innovation and entrepreneurship for:
 - a. The sustainable use of the continent's rich plant and animal genetic diversity for increasing productivity especially of small holder farming systems in a changing climate while reducing the negative impact on the natural resource base;
 - b. Increase value addition, reduce high post-harvest losses, and preserve nutrient content of indigenous African foods – crops, livestock, fish and promote the nutritional value and health benefits for addressing poverty and malnutrition;
 - c. Support governments, universities and industries to comply with international rules e.g., Intellectual Property Rights and compliance with biosafety protocols and food safety, sanitary and phytosanitary requirements for increasing market access for smallholders and SMES to trade in national, regional and international markets and ensure that food produced and sold locally is safe for domestic consumption;
 - d. Leveraging the fourth industrial revolution technology and advances in science including artificial intelligence, digitalization and genomics for increasing effectiveness of tertiary education, research and innovation as well as efficiency in production, marketing and distribution of fresh and processed foods within and across borders such that Africa gains traction in the wider global food systems.

- (2) Ensure that the results of investments in university education, training, research, innovation, and outreach programmes in particular the highly skilled alumni and technologies generated, are integrated and used to stimulate local and continental-wide economic recovery and socio-economic development. Faculty and students will be actively engaged in shaping and leading food systems transformation for the benefit of Africans and the world.

RUFORUM UNFSS Game Changers

RUFORUM universities will adopt a holistic, multi-disciplinary, multi-stakeholder approach, to ensure that indigenous knowledge and modern science and technologies are integrated into university teaching, research and innovation agenda to take advantage of opportunities for youth to see the value and prospects in agriculture to overcome challenges in Africa's food systems.

African universities investment will be used to support faculty and students working on priority food systems transformation actions in partnership with smallholders, SMEs and disadvantaged communities; women, youth and refugees thereby giving early exposure of youth to agri-business and building trust in universities as being integral to Africa's social and economic progress. National universities are crucial to working in local contexts to support evidence-based policy and harmonization of research effort.

To this end, successful past and ongoing initiatives including scholarships and graduate teacher training and graduate research grants programmes, making agriculture fit for purpose, will provide the foundation for the selected game changers that RUFORUM has identified consistent with the five tracks for the 2021 UNFSS.

UNFSS Track 1: Ensure Access to Safe and Nutritious foods

RUFORUM Game Changer

RUFORUM universities research and [community outreach programmes](#) on indigenous vegetables and other crops, livestock and fish (including aquaculture) to increase access to nutrient dense foods with the aim to reduce the burden of all forms of malnutrition, particularly deficiencies in iron, folate, and vitamins A and B12 will be expanded. Universities have also worked with school feeding/nutrition programmes, women's networks, co-operatives, to improve nutrition outcomes and household incomes. RUFORUM universities will synthesize lessons learned to design and teach new and improved courses; upscale proven research methods and outreach programmes that are yielding results at community/field level and leverage digital technologies for delivering educational/informational content on food production, sustainable use of indigenous biodiversity and nutrition-related topics.

UNFSS Track 2: Shift to Sustainable Consumption

RUFORUM Game Changer

RUFORUM universities will co-develop models to analyse present and predict future consumption trends for tackling under-nutrition and the growing obesity and NCD crisis in Africa. There is insufficient understanding of the role of traditional African diets, dietary diversity and dietary trends and traditional foods in household nutrition and tackling nutrition related diseases in Africa. Traditional diets have been marginalized as the shift to more Westernized diets which rely on the access to highly processed imported foods high in salt, sugar and fats has occurred. Increasing demand for imported poultry, red meats and dairy products is of concern. Multi-disciplinary teaching and research connecting agriculture and nutrition disciplines is required so that traditional African foods, produced in a sustainable manner are an integral part of healthy diversified diets.

UNFSS Track 3: Boost Nature-positive production

RUFORUM Game Changer

RUFORUM universities will build public-private-producer-university partnerships (PPPs) to intensify the shift from learning in controlled classroom and laboratory environments to on-farm learning (e.g. crops, livestock, fisheries) in small-holder systems and in-situ industry internships in agro-based SMEs. This is to ensure that faculty and students consider the real-life constraints these actors encounter, to pilot and evaluate best-fit options that enhance the performance of Africa's food system. Special attention will be paid to studying traditional agro-ecology, soil/carbon capture and circular-economy (reuse of waste) practices to develop and test models that reduce costs, boost productivity and contribute to environmental sustainability and reduction in green-house gas emissions. The rights of smallholders, pastoralists, SMEs and indigenous communities to benefit from their traditional knowledge will be protected.

Advanced science and technologies including genomics, precision agriculture and digitization that enable smallholders and SMEs to increase productivity and income potential will be explored and lessons from research, including ethical considerations and Intellectual Property Rights related issues will be integrated into designing new university teaching and research programmes.

UNFSS Track 4: Promote full and productive employment

RUFORUM Game Changer

RUFORUM universities will build capability of local entrepreneurs by supporting agribusiness incubation hubs that link students and faculty with private sector, financial, government and civil society representatives. This will help to develop a knowledge base on Africa's agro-SMEs as the universities work with and observe enterprises as they help them to innovate, sustain and grow markets, provide employment opportunities and contribute to reducing social tensions. Special attention will be paid to the inclusion of disadvantaged youth, women, refugees or physically handicapped persons.

UNFSS Track 5: Build resilience to vulnerabilities, shocks and stress.

RUFORUM Game Changer

RUFORUM will advocate for increased access to reliable and affordable energy including renewable energy for improving production efficiency, value addition and reducing losses along various stages in food chains in Africa. Focus will be on locations which offer significant potential for economic growth of specific food chains; or in protracted crises settings e.g. refugees/host communities requiring food storage capacity; or where residues from the rearing of crops and livestock are not being optimised (e.g., animal feed) but can be reused for biomass energy; or where land is limited and high-tech production is possible (e.g.,

hydroponics, vertical farming in the Gulf States). Meeting energy needs especially reusable energy – solar, wind and water will be prioritised.

RUFORUM's Expectations from the 2021 UN-Food Systems Summit

RUFORUM Vice Chancellors urge the Summit to endorse our efforts for securing long-term and focused investment from governments and development partners to support African universities to deliver high-quality tertiary education, research, innovation and outreach programmes to realise our collective agenda for food systems transformation in Africa. These game changes will be successful if powered by access to modern infrastructure including state-of-the art digital platforms and highly motivated faculty and students. African universities are committed to contribute to reducing hunger and poverty, improving nutrition outcomes and incomes, greater equity, environmental sustainability and resilience especially of communities that depend on agriculture for food and livelihoods.

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