

PRIORITY AREA ONE: Eradicating Hunger and Achieving Food and Nutrition Security

October 2020



Our Vision

Vibrant, transformative universities catalysing sustainable, inclusive agricultural development to feed and create prosperity for Africa.

Our Mission

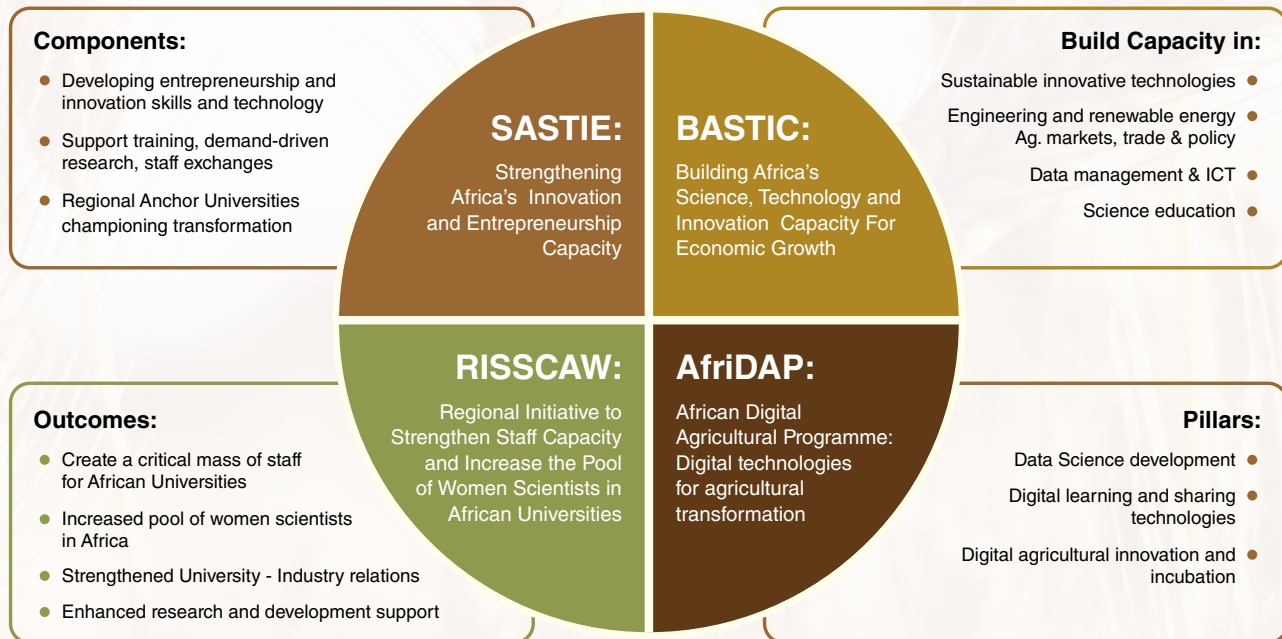
To strengthen the capacities of Universities to foster innovations responsive to the demands of smallholder farmers and value chains through the training of high quality researchers, the output of impact-oriented research, and the maintenance of collaborative working relations among researchers, farmers, market actors, national agricultural research and advocacy institutions, and governments.

Our Motivation

“Transforming agriculture in Africa requires innovative scientific research, education and outreach approaches. The education sector needs to be more connected to the new challenges facing rural communities and needs to build capacity of young people to be part of the transformation of the agricultural sector”.

Our New Thrusts

Four Continental initiatives for strengthening higher education and ST&I in Africa



Introduction

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) is a consortium of 129 universities in 38 African countries with a vision to create ‘vibrant, transformative universities to catalyse sustainable, inclusive agricultural development to feed and create prosperity for Africa’. RUFORUM operations are guided by the RUFORUM Vision 2030 that targets investment in Africa’s Agricultural Higher Education, Science, Technology and Innovations (AHESTI). RUFORUM has a Memorandum of Understanding (MoU) with the African Union Commission signed in 2014 to support the implementation of the African Union Science, Technology and Innovation Strategy for Africa 2024 (STISA -2024), Priority One “Eradication of hunger and achieving food and nutrition security”.

This report presents a summary of key achievements for the year 2019/2020 against each of the STISA strategic objectives. This period has been characterised by restrictive measures put in place to mitigate the COVID 19 pandemic challenges.

Strategic Action

Key results by July 2020

Strategic objective 1: Enhance effectiveness of STI in addressing/ implementing priority areas [for STISA-P1 by aligning with and implementation to advance the CAADP targets and the Africa’s Accelerated Agricultural Growth and Transformation Agenda (3AGT)]

Strategic Action 1.1: Set priorities, develop and implement prioritised multidisciplinary flagship programmes supported by efficient management to meet the needs of society within context of the Science Agenda for Agriculture in Africa

1. RUFORUM developed five [Continental initiatives](#) for strengthening Africa innovation capacity, increasing its competitiveness, enhancing youth employability and entrepreneurship. These included: Strengthening Africa’s Science, Technology, Innovation and Entrepreneurship Capacity for Agricultural and Economic Development (SASTIE); Building Africa’s Science, Technology and Innovation Capacity for Economic Growth (BASTIC); Regional Initiative to Strengthen Staff Capacity and Increase the Pool of Women Scientists in African Universities (RISSCAW); African

Digital Agricultural Programme: Digital technologies for agricultural transformation (AfriDAP); and, Strengthening Higher Agricultural Education in Africa (SHAEA). The Arab Bank for Economic Development in Africa (BADEA) has already accepted to fund the SASTIE continental initiative pilot feasibility study, which is ongoing in Uganda.

2. RUFORUM established functional partnerships with several agencies to deepen science, technology and innovation (ST&I) in agriculture to address emerging challenges. This included partnership with Uganda's Ministry of Science, Technology and Innovation to support efforts to enhance use of ST&I to support development processes in Uganda; Association of American Public and Land-grant Universities to benefit from the expertise of universities in the respective continents to develop new technologies and innovations to transform the agricultural sector and Africa higher education; the Food and Agriculture Organization of the United Nations to develop capacity for young family farmers and graduate students on agricultural innovations in eastern and southern Africa; Korea; and China.
3. RUFORUM produced four editions of the African Journal of Rural Development focusing on [issues facing universities as they fulfil their mandate of providing the human resources and strengthening the knowledge base of African societies; livestock productivity, crop productivity and marketing, and interdisciplinary research capacity; nutritional security, zoonotic diseases, livestock and crop improvement, and Women in socio-economic development, agribusiness and collective marketing; and, forestry.](#) The Journal has continued to provide opportunity for universities within and outside Africa to share research outputs and outcomes for rural development.
4. The Secretariat supported multi-disciplinary University teams to prepare and submit proposals to the Intra African Academic Mobility 2020 Call (20 proposals) and Erasmus+ Capacity Building in Higher Education 2020 (8 proposals). Four proposals out of the seven awarded under the Intra-Africa Academic Mobility Scheme Call for proposals EACEA/03/2019 and two under the Erasmus+ Programme of the European Union were supported through the proposal development write shops organised by the RUFORUM Secretariat. In the more recent Intra Africa Academic Mobility 2020, two teams supported by the RUFORUM Secretariat were funded.

Strategic objective 2: Improve technical competencies and institutional capacity for STI development [for STISA-P1 – build and improve systemic capabilities at national level to a sufficient critical mass - human capital, technical competencies, infrastructure, enabling environment, innovation and entrepreneurial mind-set and institutional capacity]

Strategic Action 2.1: Support building, upgrading and/or enhancing quality of agricultural R&D and AET infrastructural assets core for scientific and technological developments to support

1. In partnership with Mohammed VI Polytechnic University (UM6P) in Morocco, RUFORUM consultatively identified eight cross-cutting Masters programmes modules for enhancing agricultural sector performance/productivity in the African continent, in line with the CAADP aspirations. The courses will serve as pilots for the development of African tailored Masters courses to be delivered as massive open online courses (MOOCs).
2. Through a grant from the Carnegie Corporation of New York, RUFORUM is supporting ten (10) Staff exchanges and mobilities within RUFORUM member universities. Fellows are being placed in selected World Bank Supported African Higher Education Centres of Excellence. This is part of efforts to promote networking and partnership among African countries in building shared science and educational capacities.
3. RUFORUM continued to engage potential funders and development partners for support towards the establishment of Research Chairs, Regional Training Centres and Regional Anchor Universities across the continent.

Strategic Action 2.2: Develop and connect human and institutional capacities – enhancing technical and professional competencies, response capacities and capabilities to manage and govern the advancement of STI, integrate and co-create new knowledge to drive Africa's agricultural transformative agenda

Under this strategic action;

1. RUFORUM facilitated 51 additional university Staff placements for PhD training in Africa under the Graduate Teaching Assistantship

Programme, bringing to total 138 GTA (97 male, 41 female) from 37 Universities successfully placed in 25 universities. Already, 16 GTA Staff have completed their studies and returned to their home universities. This is a home grown initiative for joint capacity development across the RUFORUM member universities and the target is to train 325 PhDs by end 2022.

2. RUFORUM facilitated Science, Technology and Innovation (ST&I) country case studies in Uganda, Sudan, Liberia, Mali and Mozambique, to establish the status of participation of women in Science, Technology and Innovation (ST&I) in Africa. The case studies provide baselines for interventions to be undertaken under the gender-based assessment of the science, technology and innovation higher education ecosystem. RUFORUM has also commissioned similar studies in Cameroon, Democratic Republic of Congo, Ethiopia, Namibia, South Sudan, Tanzania and Zambia.

Strategic objective 3: Promote economic competitiveness through fostering innovation, value addition, industrial/ agribusiness development and entrepreneurship in synergy with other instruments

Strategic Action 3.1: Develop National and Regional innovation and knowledge systems that add value to and ensure optimal returns from investments in STI

1. RUFORUM has continued to enhance the role and visibility of science at the community level through the Community Action Research Programme (CARP+), aimed at enabling universities to work more closely with rural communities through multi-disciplinary and diverse but relevant institutional partnerships. The CARP+ projects are operational in Benin (Baobab value chain); Botswana (Safflower value chain); Kenya (cassava and potato value chains); Ghana (Pineapple value chain); Namibia (encroacher bushes value chain); South Africa (Wool value chain); Uganda (Rice, Pig and Potato value chain); Sudan (Honey Bee, Natural Resources Management, vegetable and non-timber products value chains); and, Zimbabwe (Water Harvesting value chain). Key outputs include policy briefs, and other technologies related to crop establishment and post-harvest handling.
2. RUFORUM published three issues of the Voices from the Field focusing on Insights from research-development: labs to markets

documenting experiences and lessons from the Baobab value chain in Benin implemented by University of Abomey-Calavi; enhancing Potato and Cassava value chains performance exemplifying how Egerton University is stimulating cassava producers to link directly with the breweries for commercial cassava production; and, a technical guide on African Baobab leaves production.

Strategic Action 3.2: Foster value addition, agribusiness and entrepreneurship to address and respond to African socio-economic challenges

1. To promote science and technology commercialization, selected students under the RUFORUM Community Action Research Programme (CARP+) have been supported to commercialize results of their research. The students are commercializing components of pineapple, cassava, baobab, sesame and groundnut value chains.
2. RUFORUM operationalized seven additional agribusiness incubation hubs, bringing to total 15 agribusiness incubation hubs fully operational and supporting 703 students at University of Abomey-Calavi (100); University of Burundi (48); Université Catholique de Bukavu (27); Haramaya University (83); University of eSwatini (66); University of Cape Coast (40); Egerton University (32); South Eastern Kenya University; Bishop Stuart University (116); Busitema University (50); Uganda Christian University (8); Gulu University (88); Muni University, Ndejje University (45) and University of Juba. The projects have generated 46 jobs and 120 student start-ups, 30 of which have successfully transitioned to operating outside the University campus following one full year of incubation within the university campus environment. Competitively, these students enterprises have mobilized US\$ 31,400 in capital financing from several agencies including Tony Elumelu Foundation, Mastercard Foundation, Agripreneurship Alliance and CEED Uganda.
3. The 3rd Young innovators competition was organized as part of 15th RUFORUM Annual General Meeting activities held 2-6 December 2019 in Cape Coast, Ghana. Twenty (20) winners were recognized and awarded prizes and the winners included three (3) females and seventeen (17) males from Benin (5), Gambia (1), Ghana (1), Nigeria (11), Senegal (1) and Togo (1).
4. RUFORUM jointly with the African Union Commission, the Arab Bank for Economic Development (BADEA), Arab Organization for

Agricultural Development (AOAD) and the Uganda Government organized the Afro-Arab partners' meeting under the theme: Promoting Equal Opportunity in Youth Employability and Entrepreneurship in Africa to explore opportunities of synergy and partnerships for youth in agriculture. One of the outcomes of the meeting was support from the Arab Bank for Economic Development in Africa (BADEA) to undertake a pilot feasibility study for Youth Employment and Entrepreneurship Development in the Agricultural Sector in Uganda.

Strategic Action

Key results by July 2020

Strategic objective 4: Protect knowledge production (including inventions, and indigenous knowledge) by strengthening IPR and regulatory regimes at all levels

Strategic Action 4.1: Transform and strengthen Africa's agricultural STI environment into an effective innovation system to meet Africa's socio-economic needs

1. Under the RUFORUM Entrepreneurship Challenge Programme, 90 student enterprises have been supported to secure trademarks as part of efforts to protect intellectual property emerging from respective projects.
2. RUFORUM supported the convening of the virtual third National Forum meeting in Benin and Kenya and participants were drawn from within and outside the host countries and included universities, TVET institutions, research organizations, private sector, government agencies and development partners. The Forum deliberated on agricultural innovations, research and transformation for sustainable development in the era of COVID-19 pandemic. The meetings recommended rethinking agrifood systems to be more adaptive, inclusive and resilient; supporting local production for self-sufficiency especially in nutrient dense foods; conceptualizing agrifood systems that are multi-level, multi-actor and multi-sectoral, and; harnessing and translating innovations from universities and other research institutions into products and enterprises that can significantly contribute to youth employment.
3. RUFORUM convened national higher education days and partners' meetings in Mali and Zambia that brought together policy makers, the private sector and higher education institutions for the development of higher education and ST&I sectors in the respective countries.

Strategic objective 5: Facilitate STI policy reforms, harmonization, science diplomacy and resource mobilization

Strategic Action 5.1: Through effective policy practice provide an enabling policy and institutional environment for the sustainable application and performance of science - integrating STI in strategies, plans and programs at national and regional levels

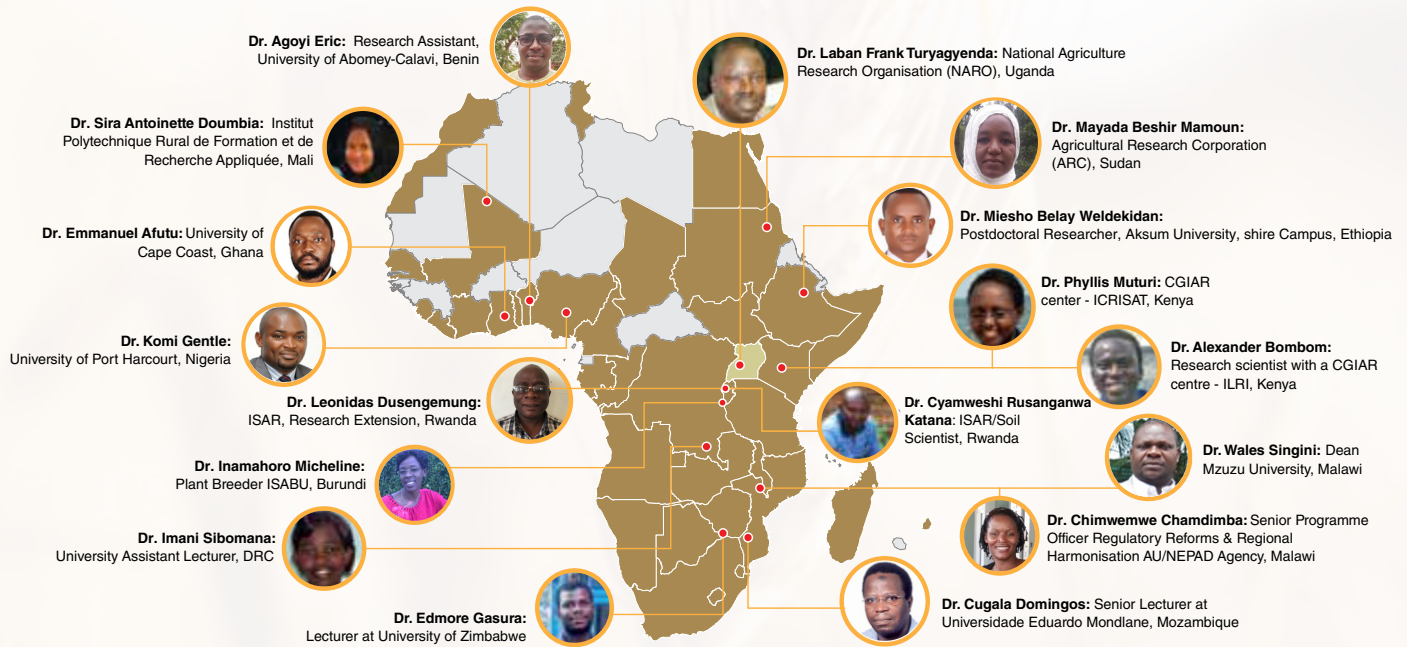
1. As part of the 15th Annual General Meeting, RUFORUM with the support of the Government of Ghana convened a Ministerial meeting to explore avenues for African Governments' investment in Agricultural Higher Education, Science, Technology and Innovation (AHESTI). The meeting which was attended by Ministers and representatives from Angola, Benin, Burundi, Cameroon, DR Congo, eSwatini, Ghana, Lesotho, Liberia, Mali, Mozambique, South Sudan, Sudan, Zambia and Zimbabwe endorsed five continental initiatives for strengthening Africa Innovation Capacity, increasing its competitiveness, enhancing Youth employability and entrepreneurship, and building Africa's Science, Technology and Innovation Capacity (Link to Communique). The meeting was attended by development partners including the African Development Bank (AfDB), Arab Bank for Economic Development in Africa (BADEA), BRIDGIN Foundation, Mastercard Foundation and OCP-Morocco.
2. RUFORUM supported the convening of the third symposium for the Forum for Women Vice Chancellors in Africa (FAWoVC) held as part of the activities of the 15th RUFORUM Annual General Meeting in Cape Coast, Ghana. The Symposium deliberated on how best to promote gender inclusivity in the Science, Technology and Innovation (ST&I) ecosystem (See Video).
3. RUFORUM continued to engage Member Governments to sign the RUFORUM Charter to endorse RUFORUM as a continental implementation agency for facilitating Higher Education and Research in Agricultural related fields, Science, Technology and Innovation. To-date, six countries, i.e., eSwatini, Ghana, Liberia, Mali, Sierra Leone and Zimbabwe have endorsed the RUFORUM Charter.

Strategic Action 5.2: Establish funds and financing mechanisms that promote national, regional and continental solidarity in agricultural STI

RUFORUM sourced funding from several development partners including African Development Bank, Arab Bank for Economic Development, Bill and Melinda Gates Foundation, BRIDGIN Foundation, Carnegie Corporation of New York, New Zealand Government and Food and Agricultural Organization of the United Nations for students' research, youth employment and entrepreneurship development and agricultural innovation for family farmers. This is an on-going activity aimed at mobilizing funding to support research and training in African Universities, helping universities to adapt to technological advances, enhancing university, industry and policy linkages, and supporting Youth entrepreneurship skills development and employability.

RUFORUM graduates resourcing universities and research institutions

RUFORUM Alumni - Continental Impact



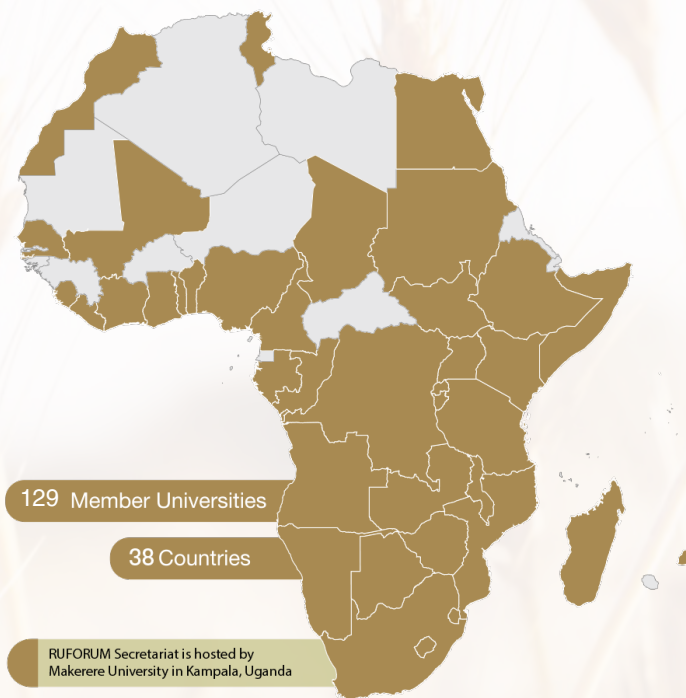
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