

The Regional Universities Forum for Capacity Building (RUFORUM)

Priority Area One:
Eradicating Hunger and
Achieving Food and
Nutrition Security



SUMMARY REPORT ON IMPLEMENTATION

Submitted: August, 2019

Introduction

This report presents a summary of key achievements for the year 2018/2019 under the 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**”. The report aligns to each of the commitments spelt out in the Science, Technology and Innovation Strategy for Africa (STISA 2024) Priority One. Below is a summary of key results undertaken by the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) is a consortium of 120 Universities in 38 countries against each of the strategic objectives as of August, 2019. RUFORUM operations are guided by the [RUFORUM Vision 2030](#) with a vision statement to create ‘*vibrant, transformative universities to catalyse sustainable, inclusive agricultural development to feed and create prosperity for Africa*’.

Strategic Action	Key results by August 2019
	<p>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)]</p>
	<p>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</p> <p>To support multi-disciplinary research in Africa, RUFORUM is implementing the Community Action Research Programme (CARP). The CARP program aims to encourage universities to develop and invest in more comprehensive and sustained action research into a particular geographical area or in a selected commodity along the full value chain. The CARP+ is defined by inclusion of the TVET. Seven universities including University of Free State, South Africa (wool value chain); Botswana University of Agriculture and Natural Resources, Botswana (safflower value chain); University of Namibia, Namibia (encroacher bushes value chain); University of Gezira (sweet potato and goat value chain), University of Khartoum (agroforestry & fruit trees); University of Kordofan (natural resource management); and, Peace University (honeybee value chain) are engaged in the CARP initiative. The projects include a mandatory collaboration with rural communities and/or technical, vocational education and training institutions. The nine ongoing CARP projects have engaged 9121 smallholders in collaborative research with Universities.</p> <p>RUFORUM supported nineteen (19) multi-disciplinary research teams from 35 RUFORUM member Universities to successfully submit proposals to the African Union 2019 Intra-Africa Academic Mobility Scheme (IAAMS) call for proposals. This was made possible through the TAGDev programme supported by the Mastercard Foundation, and Université Mohammed VI Polytechnique (UM6P), Morocco.</p>
	<p>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]</p>
	<p>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</p> <ol style="list-style-type: none"> 1. As part of developing quality human resources and capacity required to intensify and increase Africa’s agricultural productivity, RUFORUM awarded 22 additional PhD scholarships to escalate doctoral training on the African Continent; in addition 36 additional Masters; and 58

Strategic Action	Key results by August 2019
	<p>undergraduates scholarships were provided bringing to total 525 PhDs, 1919 Masters and 118 undergraduates supported by RUFORUM.</p> <p>2. Through the home grown cost sharing initiative Graduate Teaching Assistantship programme (GTA), ninety (90) University staff (24 female; 66 male) have been supported to undertake PhD studies. This is aimed at increasing the number of PhD trained staff in African universities. The staff originated from twenty nine (29) Universities in fourteen (14) African nations including Democratic Republic of Congo; Ethiopia, eSwatini, Ghana, Kenya, Lesotho, Liberia, Malawi, Namibia, Nigeria, Rwanda, South Sudan, Sudan, and Uganda.</p> <p>Both initiatives promote high quality necessary for agricultural transformation at the university /higher education level, but further supporting the national agricultural research system with human resource and R&D engagements.</p> <p>3. Attracting and retaining females into science, technology, innovations and mathematics is one of the key areas of focus under RUFORUM. To this end, RUFORUM supported the second convening of the Forum for Women Vice Chancellors in Africa (FAWoVC) as a side event at the Sixth African Higher Education Week and RUFORUM Biennial Conference, held in October 2018 in Nairobi, Kenya. The Forum deliberated on leadership, mentorship, intellectual property rights and patterns amongst other issues (See FAWoVC Report).</p> <p>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.</p> <p>1. The Community Action Research Programme (CARP+) and Entrepreneurship challenge programme (RECAP) research teams have been used to enhance the technical and professional competencies of the university staff and students in linking with communities and generating technologies and research outputs that address the needs of especially the small holder farmers. .</p> <p>2. Human capacity in university and the tertiary and vocational education training institutions have benefited from specialised and generic training programmes under RUFORUM, for example:</p> <p>a) Through Leadership in scientific research training undertaken in partnership with the Africa Women in Agricultural Research and Development (AWARD).</p> <p>b) Scholarly and scientific short skills enhancement training of 49 Doctoral students (7 female and 42 male) at the University of Burundi. The trainees including staff and graduate students who attained skills and competences in scientific writing for journal manuscript production.</p> <p>Strategic Action 2.3: Build systems for data collection and analysis, as well as sharing of information on progress towards major goals and implementation of activities</p>

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	<ol style="list-style-type: none"> 1. A complete set of 40 institutional fact sheets on capacities in agricultural higher education including time series data on degree programs offered, research focus by major commodity area, number of peer-reviewed publications, and various demographic characteristics of teaching staff and student populations were published. These reports provide decision makers with a solid understanding of staffing and student capacities in the higher education sector, as well as in the wider agricultural innovation systems in Africa. This activity was undertaken in partnership with IFPRI/ASTI, website: https://www.asti.cgiar.org/ 2. RUFORUM has continued to document achievements and process to further guide agricultural transformation. The <i>Voices From the Field</i>, a periodic publication documenting research and development in specific value chains is now being regularly published and has potential for dissemination across member universities and countries that operate similar value chains.
<p>Strategic objective 3: Promote economic competitiveness through fostering innovation, value addition, industrial/ agribusiness development and entrepreneurship in synergy with other instruments</p>	
<p>Strategic Action 3.1: Develop National and Regional innovation and knowledge systems that add value to and ensure optimal returns from investments in STI</p>	
	<ol style="list-style-type: none"> 1. RUFORUM continued to implement the nine RUFORUM Entrepreneurship Challenge Program (RECAP) projects that have engaged 339 incubatees (122 female; 217 Male) in business development, with overall fund recovery of up to 60%, indicating viability of the enterprises the students adopt. The RECAPs have provided universities with opportunity to engage with the private sector, enabled students establish own enterprises, add value to agricultural commodities, develop innovations, and secure financing from the private sector Including Tony Elumelu Foundation and the Agripreneurship Alliance. The RECAPs operate within the framework of the Community Action Research Program that focuses on a value chain to bring out all potential agri-businesses and other enterprises by staff and students. 2. An additional (9) RUFORUM Entrepreneurship Challenge Program (RECAP) projects were awarded to member universities in southern, eastern and west Africa) under the support from Mastercard Foundation (seven RECAPs) and African Development Bank (two RECAPs)..
<p>Strategic Action 3.2: Foster value addition, agribusiness and entrepreneurship to address and respond to African socio-economic challenges</p>	
	<ol style="list-style-type: none"> 2. During the year, RUFORUM catalysed entrepreneurship development by competitively identifying and supporting promising business innovations developed by Africa's Youth, through the 2018 RUFORUM Young African Entrepreneurs Competition (RUYAEC). The competition attracted 1,332 applicants from 42 African and 4 non-African countries. Twenty three (23) successful applicants were each awarded a seed fund to further their innovations
<p>Strategic objective 4: Protect knowledge production (including inventions, and indigenous knowledge) by strengthening IPR and regulatory regimes at all levels</p>	
<p>Strategic Action 4.1: Transform and strengthen Africa's agricultural STI environment into an effective innovation system to meet Africa's socio-economic needs</p>	

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	<p>1. RUFORUM convened the Sixth Africa Higher Education Week and RUFORUM Biennial Conference which advised African universities to effectively harness the Intellectual Property (IP) System to enhance commercialization of research outputs and to stimulate creativity linked to industrialization in Africa. Further recommended that World Intellectual Property Organization (WIPO), Africa Intellectual Property Organization (ARIPO), Union for the Protection of New Varieties of Plants (UPOV) and RUFORUM to develop partnership to strengthen university participation in Intellectual Property (IP). This followed the one day IPR orientation training for 150 Principals and Deans, and another for 80 Vice Chancellors from across Africa. The training was conducted by WIPO.</p>
<p>Strategic objective 5: Facilitate STI policy reforms, harmonization, science diplomacy and resource mobilization</p>	
<p>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</p>	
<p>1. Engagements have been through the Committee of Ten African Heads of State (C10) championing Education, Science, Technology and Innovation development in the continent. The C10 was endorsed by the African Union Assembly of January 2018 and held its first Extra-Ordinary Summit hosted by the Government of the Republic of Malawi, 2-3 November 2018 in Lilongwe, Malawi. Accordingly, the C10 Declaration and Action Plan were adopted with three major commitments including; 1) investing in education, science and technology; 2) promoting education in Africa; and, 3) engaging the private sector.</p> <p>2. RUFORUM has continued to engage member university governments to promote agriculture, science technology and innovations. National Forums were hosted by the University of Liberia and the Government of Liberia, The Institut Polytechnique Rural de Formation et de Recherche Appliquée (IPR/IFRA) and the Government of Mali; the University of Zambia and the Government of Zambia to advance the role of education, skills development, and science, technology and innovation.</p> <p>3. RUFORUM participated in the joint meeting of SADC Ministers responsible for Education and Training, Science, Technology and Innovation in Windhoek, Namibia (20-21 June, 2019). The Ministerial statement highlighted progress in the development of continent-wide programmes including Building Africa's Science, Technology and Innovation Capacity (BASTIC), Strengthen Agricultural Higher Education in Africa (SHAEA), Strengthen Africa's Science, Technology, Innovation and Entrepreneurship Capacity for Economic Development (SASTIE), and escalating doctoral training and strengthen staff capacities in African Universities as well as increasing the pool of women scientists in Africa by RUFORUM.</p>	
<p>Strategic Action 5.2: Establish funds and financing mechanisms that promote national, regional and continental solidarity in agricultural STI</p>	
<p>RUFORUM focus for resource mobilisation is through partnership and synergy with partners focus areas. As such, RUFORUM hosted a Development Partners meeting in Marrakech, Morocco from 20th to 22nd March 2019 to provide a platform for dialogue between the African tertiary education sector and the global and African development partners to chart a way forward for transforming African agricultural higher education, science, technology and innovation (AHESTI).</p>	

