

The Regional Universities Forum for Capacity Building (RUFORUM)

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



2nd SUMMARY REPORT ON IMPLEMENTATION OF STISA 2024

Submitted: June, 2016

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), is an association of 60 African universities in 25 African countries, with a 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, governments and industry.. RUFORUM’s wide network harnesses Africa’s university based resources and makes use of its ‘convening’ power to leverage **economies of scope and scale to increase agricultural output and use to support economic growth in Africa**. RUFORUM’s mandate is underpinned by a **Memorandum of Understanding (MoU) with the African Union Commissioned 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”**. As part of this role, RUFORUM worked with continent-wide stakeholders to develop the STISA (2024) Priority One Implementation Plan with its related flexible reporting modalities for partners to annually report on progress to the African Union Commission.

The Science, Technology and Innovation Strategy for Africa 2024 (STISA -2024), was adopted by African Heads of State during the 23rd Ordinary Session of the AU Executive Council in June 2014 Summit in Malabo (decision EX.CL/839(XXV), to accelerate Africa’s transition to an innovative-led, knowledge-based economy. The STISA 2024 is a ten year strategy to enhance the use of Science, Technology and Innovation to underpin social and economic development in Africa. The Strategy contributes directly to the African Union Agenda 2063 (“the Future we want”) and represents the first of six 10 year strategies for building science and innovation capacity in Africa. The STISA 2024 is designed for implementation in six priority areas viz. 1) eradication of hunger and achieving food and nutrition security; 2) prevention and control of diseases; 3) communication (physical and intellectual mobility); 4) protection of our space; 5) live together- build the society; and 6) wealth creation. In this context, agriculture is highlighted as requiring both technologies and skills that are relevant to current smallholder farmer context in which they live and require the involvement of multiple academic disciplines in a long-term regional partnership. STISA (2024) is at the heart of the Pan-African Agenda 2063, which is a shared strategic framework for inclusive growth and sustainable development and global strategy to optimize the use of Africa’s resources for the benefit of all Africans.

The STISA 2024 strategy and therefore by extension, the Pan-African Agenda 2063, recognise that African Higher Education institutions are critical drivers of economic growth and development on the continent. Under their research and human capital development ambit, African universities are at the core of national Science and Innovation systems and they contribute to key functions of knowledge generation, and its effective utilisation. This Abridged Report is an update of the Annual Report that was submitted to the Department of Human Resources, Science and Technology of African Union Commission, in September 2015, and presents key engagements and contribution of RUFORUM and its Member universities on each of the Strategic objectives and Action Areas of the STISA 2014 Priority One Implementation Plan as of June 2016.



Summary of Key Results as of June 2016

Strategic Action	Key results by June 2016
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)]	
<i>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</i>	<ol style="list-style-type: none"> 1. Through a continental-wide consultative process, developed the Implementation Plan for STISA 2024 Priority One 2. Contributed to the Human Development, Education, Science, Technology and Innovation Youth Report on Annual Continental Activities for 2015 on progress on STISA 2024 Priority One Implementation 3. Developed a Strategic Business Plan and Implementation Strategy for RUFORUM Member Universities that ensures university and stakeholder alignment with CAADP¹, Malabo Declaration², S3A³ and STISA 2024 4. RUFORUM mobilised African governments to fund higher education and capacity development in their countries through the World Bank funded African Higher Education Centres of Excellence in Eastern and Southern Africa. The World Bank has approved for funding 24⁴ Projects to develop Academic Centres of Excellence (ACE). The Projects in ESA will receive coordination support from the Inter-University Council of East Africa; 5. A knowledge repository developed to facilitate access and use of research outputs to support policy and enhance agricultural output

¹ Comprehensive Africa Agriculture Development Programme

² The Heads of State and Government of the African Union meeting in June 2014, in Malabo, Equatorial Guinea adopted two (2) Decisions and two (2) Declarations which directly relate to CAADP and Africa's agricultural transformation and food security agenda in the 2015-2025 decade

³ Science Agenda for Agriculture in Africa

⁴ Academic Centres of Excellence awarded per country; 4 Ethiopia, 3 Kenya, 2 Malawi, 4 Rwanda, 4 Tanzania, 4 Uganda, 2 Zambia and 1 Mozambique For details visit: <http://www.worldbank.org/projects/P151847?lang=en>



Strategic Action	Key results by June 2016
<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 mindset and institutional capacity]</p>	
<p><i>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 Africa’s agricultural growth and transformation, including access to their use by researchers</i></p>	<ol style="list-style-type: none"> 1. Expanded the geographical coverage of RUFORUM operations to cover the entire continent 2. Established a vibrant African academic mobility programme, the Graduate Teaching Assistantship (GTA) to support strengthening of research capacity at African Universities through the training of African Universities’ staff to PhDs level 3. Developed 15 regional level curricula (8 PhD and 7 MSc) hosted at regional centers of academic excellence to support skills development in strategic areas required for implementation of CAADP, S3A and STISA. The eight centers were facilitated to apply for the World Bank funding to enhance their quality and escalate postgraduate training and research output 4. Developed online infrastructure to facilitate distance learning for the Master’s degree in Research Methods to enhance access and research capacities. To date, 83 Masters Students have been trained and are supporting research methods capacity building at African universities and related knowledge centers 5. Developed MoU among African Universities to facilitate the academic and administrative staff and students’ mobility 6. Trained 1433 MSc field based graduates to support the implementation of agricultural development programmes in Africa 7. Trained 315 PhD graduates for African national agricultural research systems that will support strengthening research and training capacities in Africa. Over 94% remain in their home countries, and were employed within 6 months of completion 8. Increased enrollment of women in RUFORUM supported programmes at postgraduate level from 8% in 2004 to 42% in 2015 compared to average female enrollment rates in agricultural sciences South of Sahara of 13%
<p><i>Strategic Action 2.2: Develop and connect human and institutional capacities – enhancing technical and professional competencies, response capacities and capabilities</i></p>	<ol style="list-style-type: none"> 1. Developed a RUFORUM Capacity Development Strategy to guide African university capacity building efforts to respond to the needs of key clients and stakeholders; 2. Commissioned case studies on the status of higher education sector in six (6) selected countries representing sub-Saharan Africa to inform policy interventions 3. Launched and produced two editions of the African Journal of Rural Development that publishes both



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<p>to manage and govern the advancement of STI, integrate and co-create new knowledge to drive Africa's agricultural transformative agenda</p>	<p>academic and non-academic action research issues to share knowledge on all aspects that contribute to sustainable rural development in Africa. The Journal is multidisciplinary in nature and it aims to share lessons and experiences on working with rural communities to improve agricultural productivity and livelihoods</p> <ol style="list-style-type: none"> 4. Convened regional events for fostering university, private sector and civil society collaboration and partnerships to enhance delivery of university AR4D 5. Supported the development of curricula to equip youths with skills in agribusiness, entrepreneurship and agricultural value chains in member universities 6. Developed demand driven curricula in response to emerging and gap areas to support implementation of CAADP. Postgraduate Programs have been developed in the following areas; Crop Improvement, Research Methods, Monitoring and Evaluation, Agro-meteorology and Natural Risk Management, Climate Change and Dryland Resource Management, Agricultural Information and Communication Management, Aquaculture and Fisheries, Soil and Water Management, Agriculture and Rural Innovation systems, Food System, Nutrition and Ecosystem Management, Gender and Agricultural Policy Analysis 7. Established a vibrant agricultural R&D community of practice with over 18,000 members
<p><i>Strategic Action 2.3:</i> Build systems for data collection and analysis, as well as sharing of information on progress towards major goals and implementation of activities</p>	<ol style="list-style-type: none"> 1. Jointly with IFPRI/ASTI, developed a prototype for collection of data on indicators that track research investments and human capacity development in African universities. First round data has been collected and will be launched in October 2016, during the fifth African Higher Education Week in Cape Town, South Africa 2. Engaged and currently facilitating Member Universities to report on their actions and contribution towards STISA 2024 Priority Area One implementation 3. Supported regional and national convenings of academic and administrative leaders to improve academic performance including completion rates in African universities 4. Facilitated academic staff and stakeholders to participate in national and international exchanges through online platforms (social media and D-groups) 5. Promoted the use of ICTs for teaching, learning, research and outreach, through the development of online education resources and initiated processes of piloting Massive Open Online Courses (MOOCs)



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Strategic objective 3: Promote economic competitiveness through fostering innovation, value addition, industrial/ agribusiness development and entrepreneurship in synergy with other instruments	
<i>Strategic Action 3.1:</i> Develop National and Regional innovation and knowledge systems that add value to and ensure optimal returns from investments in STI	<ol style="list-style-type: none"> 1. Commissioned nine (9) Community Action Research Programs (CARPs) with focus on commodity value chains and deploying multi-disciplinary research teams with additional emphasis on systems approach and regional learning; with each CARP reaching on average 5000 smallholder households 2. Engaged 306 Junior and Senior researchers from African Universities working on agricultural research that is designed to have a potential reach 300,000 households
<i>Strategic Action 3.2:</i> Foster value addition, agribusiness and entrepreneurship to address and respond to African socio-economic challenges	<ol style="list-style-type: none"> 3. Member universities mobilised to engage in agribusiness incubation and entrepreneurship oriented training at Makerere University , Kyambogo University, Kenyatta University, Jomo Kenyatta University of Agriculture and Technology, Moi University and University of Zambia 4. Facilitated university-industry partnerships to strengthen agri- entrepreneurship such as at Stellenbosch University (South Africa) with Standard Bank, Gulu University with Centenary Bank and Egerton University with Equity Bank. 5. Engaged international partnership to share best practices such as with EARTH (Costa Rica), Wageningen University and Research Centre (Netherlands), SUPAGRO (France), University of Copenhagen (Denmark), Norwegian Agricultural University, Swedish Agricultural University, Fresh Water Fish Research Centre (China).
Strategic objective 4: Protect knowledge production (including inventions, and indigenous knowledge) by strengthening IPR and regulatory regimes at all levels	
<i>Strategic Action 4.1:</i> Transform and strengthen Africa's agricultural STI environment into an effective innovation system to meet Africa's socio-economic needs	<ol style="list-style-type: none"> 1. Established 9 National Forums to strengthen university engagement with policy actors, to get feedback to enhance demand orientation of university research and training and improve advocacy for quality training and investment 2. Developed a regional Intellectual Property Rights policy for member universities to improve use of research outputs. This now needs to be further improved. 3. Piloted use of regional programmes to test and validate joint implementation of academic programmes 4. Developed a regional quality assurance mechanism and credit transfer system for post graduate training in agriculture and related sciences
Strategic objective 5: Facilitate STI policy reforms, harmonization, science diplomacy and resource mobilization	
<i>Strategic Action 5.1:</i> Through effective policy practice provide an enabling policy and institutional	<ol style="list-style-type: none"> 1. Held continental biennial convening in 2014 on Africa Higher Education Week to strengthen/foster effective partnerships and multi-stakeholder platforms for coordination. The next event, the 5th African Higher Education Science Week is due 17-21 October 2016 in Cape Town, South Africa with a theme;



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environment for the sustainable application and performance of science - integrating STI in strategies, plans and programs at national and regional levels	<p><i>“Linking Agricultural Universities with Civil Society, the Private Sector, Governments and other Stakeholders in support of Agricultural Development in Africa”</i>. The Session will be addressed by Her Excellency Dr. Ameenah Gurib-Fakim, President of Mauritius.</p>
<i>Strategic Action 5.2:</i> Establish funds and financing mechanisms that promote national, regional and continental solidarity in agricultural STI.	<ol style="list-style-type: none"> 2. Contributed to the holding of the first Africa Higher Education Summit held in Dakar in March 2015, which provided impetus for the African Union to establish a committee of the 10 Heads of State to champion Education, Science and Technology development in Africa 3. Worked with the President of Malawi to host a side event at the United Nations’ General Assembly on 26 September 2015 at the UN headquarters in New York to mobilise partnerships and support for Higher Education in Africa 4. RUFORUM in liaison with the Government of Malawi initiated arrangements to identify and engage high net worth persons (African philanthropies and private sector leaders) to fund Higher Education in Africa

