

Regional Universities Forum for Capacity Building in Agriculture Secretariat Quarterly Report

1st April- 30th June 2020

Summary

This report gives an overview of activities undertaken during the period 1st April-30th June 2020 (the fourth and last quarter of the Financial Year 2019/2020, and the second year of implementing the operational plan-2018-2022 of RUFORUM Vision 2030). This quarter was during the period of the COVID 19 pandemic characterized by measures to mitigate spread of the disease, such as lock down, curfew, social distancing, quarantine and isolation. As such, several of the activities were undertaken with Staff working from home.

Below are the highlights of progress made:

- 1. The Secretariat provided guidelines to research teams on how to continue implementing their research projects and other activities in the face of the COVID-19 pandemic.
- 2. The Secretariat initiated Webinar series to galvanize dialogue among stakeholders and the response of the higher education sector to the COVID-19 pandemic. Fourteen webinars have been scheduled.
- 3. Four (4) of the students supported under the RUFORUM Graduate Teaching Assistantship Programme completed studies at Gulu University in Uganda and University of Port Harcourt in Nigeria.
- 4. The Republic of Mali signed the RUFORUM Charter, becoming the fifth African Nation to sign.
- 5. In response to the COVID 19 pandemic, the RUFORUM Entrepreneurship Challenge (RECAP) project at Bishop Stuart University in Uganda reconfigured one of their innovations to manufacture sanitizers.

INTRODUCTION:

The narrative below details RUFORUM Secretariat's progress and achievements made during the period 1st April-30th June 2020, the last quarter of the financial year 2019/20. The report is arranged by Flagship Programmes of the RUFORUM <u>Vision 2030</u>:

- 1. Transforming African Agricultural Universities to meaningfully contribute to Africa's Growth and Development (TAGDev), mainly supported by the Mastercard Foundation seeks to transform African agricultural universities and their graduates to better respond to developmental challenges through enhanced application of science, technology, business and innovation for rural agricultural transformation.
- 2. Cultivating Research and Teaching Excellence (CREATE) seeks to realign universities' research and teaching functions into a more integrated model with a focus on problem solving and enhancing the capacity of the entire university academic practice and outreach system mainly.



- 3. Regional Anchor Universities for Higher Agricultural Education (RANCH) seeks to escalate the setting up of a network of linked universities as African anchor universities/African centres of excellence and academic leadership in agricultural higher education and learning.
- 4. Knowledge Hub for University Networking, Partnership and Advocacy (K-Hub) builds on RUFORUM's convening power and facilitates the creation, capture, organising, sharing and refining of information and content across teams and geographic locations thus increasing access to latest evidence based information and knowledge.

Flagship programme: TAGDev-Transforming African Agricultural Universities for Africa's Growth and Development

a) Recruit students (PhD, MSc, BSc and TVET students) to create Africa's new age of development practitioners and cadres

The Secretariat recruited six postgraduate students (2 PhD, 4 MSc.) at the University of Namibia under the Bush Encroachment Community Action Research Programme (CARP) to support the delivery of innovations, technologies and management practices for the control and management of invasive plants and harnessing their economic potential through development of alternative products. Cumulatively, 380 students (20 PhD, 177 MSc and 183 BSc) have been supported to undertake higher education with support from the Mastercard Foundation, of which 18 Masters Students have already completed studies. The Secretariat further received 691 masters' applications from 27 African countries for the fourth cohort of the TAGDev scholarship programme tenable at Gulu University and Egerton University. Under this round 30 scholarships will be offered.

b) Scale-out agribusiness incubation centers and accelerators (at least 11 new Agribusiness incubation hubs) at selected BTVET institutions, universities and communities to engage Africa's youth in innovation and investments in agriculture

Due to the COVID 19 pandemic, activities in the six agribusiness incubation hubs were affected. However, a few such as the agribusiness incubation centre at Bishop Stuart University in Uganda reconfigured some of their product lines to produce hand sanitizers that are now available on the local market.



Hand Sanitizers manufactured under the RECAP Project at Bishop Stuart University



Other RECAP projects that have remained functional include those at the University of Burundi and Catholic University of Bukavu (DR Congo). For Egerton University (Kenya), seven enterprises are functional. One of the enterprises that produces chicken brooders, *Plotus Enterprise* has received 31 orders from the World Bank to supply farmer groups in Nakuru, Kisumu and Mombasa counties.



Malkia chicken brooders by Plotus enterprise under the AGLEAD RECAP at Egerton University

c) Support field attachment of students (both MSc and BSc) to communities for experiential learning and further enhance the delivery of complimentary agricultural advisory services through Field Attachment Program Awards (FAPA)

During the quarter, ten (10) students' field attachments in Zimbabwe (2), Ghana (4), Benin (2) and Kenya (2) commenced. Six attachments are focusing on innovation, products and market development along the pineapple, cassava, ground nut and sesame value chain as part of translating respective research results and innovations into business. Four of the attachments focused on direct engagement with smallholders have been put on hold due to the COVID -19 pandemic.

d) Support the integration of University teams in interdisciplinary and multi-agency research through Community Action Research to strengthen commodity value chains for smallholder farmers and agribusinesses

Despite the unprecedented effects of COVID-19, the direct engagement with farmers and university research teams continued. For example, 200 smallholder farmers received technical training and 1000 bee hives to undertake apiary production as a commercial enterprise from Peace University (Sudan). Five value added products have been developed and are ready for commercialization (pure potato, potato-sorghum blend, potato flour blended with vitamins and different aromas, potato mini-cookies and biscuits) in the potato CARP+ at Makerere University (See Video). Other technologies developed under CARP+ projects include disease-free cassava planting material at University of Nairobi.



e) Synthesize and publish lessons emerging out of the implementation of CARP+ and RECAP

During the quarter, students and Principal Investigators continued to document and share experiences and lessons from the implementation of respective projects and business enterprise undertakings. The following stories were profiled under the RUFORUM blog:

- i. My motivation to start a business was to respond to society's needs
- ii. My research got me into a USAID funded Project
- iii. Fighting Malnutrition among Children aged 2-5,one pancake at a time
- iv. Communities in Gulu appreciate training on disinfecting bacteriologically contaminated drinking water
- v. Watermelon production is profitable and rewarding
- vi. Harvesting business growth from COVID-19 Pandemic: a young entrepreneurs' experience
- vii. <u>University of Free State catalysing quality and increasing profitability of the wool value chain in</u> small scale farmers in the Free State
- viii. Cassava, a crop with unexploited opportunities in Coastal part of Kenya
- ix. Let's talk agribusiness: Opportunities in the cassava value chain at the Kenya Coast region
- x. <u>It is beyond high yield when selecting cassava varieties for planting</u>. An experience from Bukedea and Kumi districts in Uganda
- xi. <u>Farmer Misconceptions of Cassava Diseases</u>, <u>Income and Food Security Opportunities from Cassava Production in Coastal Kenya</u>.
- xii. Sowing seeds of transformation among cassava producers: Experiences with farm households in Kilifi and Taita-Taveta counties at the Kenyan coast.
- xiii. Sowing seeds of transformation among cassava producers: Experiences with farm households in Kilifi and Taita-Taveta counties at the Kenyan coast.

Emerging lessons and issues

The CARP+ projects are highly catalytic in mobilizing multi stakeholder engagement in addressing constraints along various agricultural value chains. With the appropriate business plans and implementation the enterprises emerging from the CARP+ can be profitable and generate employment for the Youth.

Flagship programme: RANCH: Regional Anchor Universities for Higher Agricultural Education

Support establishment of Regional Anchor Universities

During the quarter, 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. There is on-going dialogue involving the Arab Bank for Economic Development in Africa (BADEA), Uganda Government and RUFORUM Secretariat on possibility of establishing two Regional Training Centres in Uganda, and a Feasibility Study to this effect will commence during the 2020/2021 Financial period.

Emerging lessons and issues



Resource mobilization for the RANCH flagship programme continues to be highly critical towards the successful implementation of the initiatives embedded therein.

Flagship programme: CREATE-Cultivating Research and Teaching Excellence

a) <u>Facilitate Academic Staff Development (ASD) through the Regional Academic Mobility</u> (RAM) and Graduate Teaching Assistantship (GTA) programs

RUFORUM issued a <u>call</u> for academic Staff Exchange Fellowship for the 2020/2021 Academic year as part of efforts to facilitate academic staff development, and, enhance faculty teaching, research and collaboration among RUFORUM Member Universities. A total of 38 Expressions of Interest were received from 10 countries. Ten Fellows will be selected for placement at selected African Higher Education Centers of Excellence.

Under the Graduate Teaching Assistantship Programme (GTA), five students (1 female and 4 male) from three universities: University of Liberia (3), Université Evangélique en Afrique (1) and Université Catholique de Bukavu (1) were recruited. These will undertake studies at University of Eldoret and Université Cheikh Anta Diop De Dakar. Cumulatively, 129 (88 male, 41 female) GTA students from 37 African Universities are undertaking PhD studies in 26 universities. With support from the Carnegie Corporation of New York grant 2020/2021, 42 additional GTAs will be supported to undertake doctoral research.

Four students (all male) completed studies at University of Port Harcourt (2) and Gulu University (2), bringing the total to nine (9) GTA students that have completed studies so far.

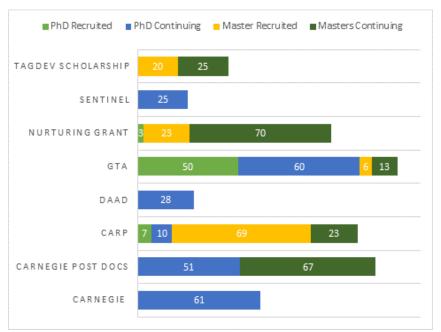
b) <u>Develop mechanisms for increasing the participation of Women in science, technology and innovation (ST&I) interventions in RUFORUM member universities</u>

Activities for increasing participation of women in science technology and innovation continue to be integrated in other initiatives such as the Graduate Teaching Assistantship programme, Carnegie Post-doctoral Fellowship programme, the TAGDev Programme and the Graduate Research Grants.

c) Escalate doctoral training to increase the pool of science leaders in Africa

Twelve (12) PhD students were recruited under the Community Action Research Programme and the Graduate Teaching Assistantship Programme, bringing the total of students on the different PhD Programmes to 295.





Continuing PhD and Masters Students under the different granting portfolios of RUFORUM

d) Provide opportunities for postgraduate training for students from fragile States and other disadvantaged communities

A total of 191 students from nine fragile countries continued to pursue PhD (63) and Masters (128) studies in the different RUFORUM Member universities. In addition, 12 undergraduate students from four fragile States (Cameroon, DR Congo, Liberia and Zimbabwe) were supported to undertake graduate studies.

e) Provide opportunities for Masters and PhD graduate students to share research findings, to obtain mentorship support, skills enhancement and to engage with scientists in the agricultural and education space

During this quarter, selected students received psychosocial support and online-based mentorship. In addition, students supported under the SENTINEL project were introduced to the "Serious Gaming" methodology which is used to help understand farmers' motivation and decision making processes related to agricultural expansion. The Secretariat has also initiated on-line discussion meetings to monitor progress of students pursuing PhD studies under the Graduate Teaching Assistant Programme. This will be extended to other groups of students.

f) Support the implementation of RUFORUM Post-Doctoral Fellowship Programme

With support from Carnegie Cooperation of New York, RUFORUM issued a <u>call</u> to support 10 Post-Doctoral Fellows. Twenty-nine (29) proposals (18 males, 11 females) were received from 11



African countries and are currently undergoing review. The Secretariat continued to undertake implementation oversight of the 19 Post-Doctoral Fellows that are mentoring 51 PhD students, 67 masters and 19 undergraduate students.

Emerging lessons and issues

The Postdoctoral programme has potential to build the capacity of the Fellows to work in multidisciplinary research teams, to mentor and supervise students, and to run research projects successfully. There is however need to extend the duration of the Fellowship to three years in order to realize the expected outputs. Secondly, students and staff under the different programmes need to take advantage of existing e-resources.

A key challenge during the period was the interruption of teaching and research in all our Member Universities. This challenge will continue during the coming period as universities make arrangements for online teaching delivery. Clearly students' research projects will be delayed. Moreover majority of foreign students were not able to travel back to their home countries due to travel bans as a result of COVID-19 Pandemic.

Flagship programme: K-HUB-Knowledge hub for university networking, partnership and advocacy

a) Review RUFORUM National Forums guidelines to align to the OP 2018-2022 and convene four forums to provide a platform for stakeholders to articulate demands for university services, advocate for change, and provide feedback on the utility of university services

During the quarter, one National Forum meeting was held in Kenya at Egerton University and attracted 152 participants within and outside Kenya. The meeting brought together universities, TVET institutions, research organizations, private sector, government agencies and development partners to deliberate on agricultural innovations, research and transformation for sustainable development in the era of COVID-19 pandemic. The meeting recommended rethinking food systems to be more adaptive, inclusive and resilient; supporting local production for self-sufficiency especially in nutrient dense foods; conceptualizing food 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.

b) Widen and enhance online and offline Information Technology (IT) platforms

The Secretariat increased the visibility of the Graduate Teaching Assistantship Programme by profiling the students under the programme. Furthermore, the Secretariat conducted two successful webinars on "Learning from a crisis: University leaders' response to the COVID-19 Pandemic" and "Re-imagining higher education in Africa in the 'new normal." The webinars galvanize dialogue among stakeholders and the response of the higher education sector to the COVID 19 pandemic. Fourteen webinars have been scheduled.



c) Facilitate universities to deliver relevant and practical training exploiting the latest electronic means to deliver and enhance the student learning experience

RUFORUM facilitated two Universities (Egerton and Gulu University) to set up a licensed Zoom conferencing facility for conducting online classes, meetings and webinars. Each institution was given four licensed Zoom and webinar accounts. Other activities included sharing of the RUFORUM Weekly, Media monitoring extracts and Thought Pieces.

d) Provide training on the merit of Open source software to facilitate universities in the use of Open Access software to provide complimentary agricultural extension and advisory services

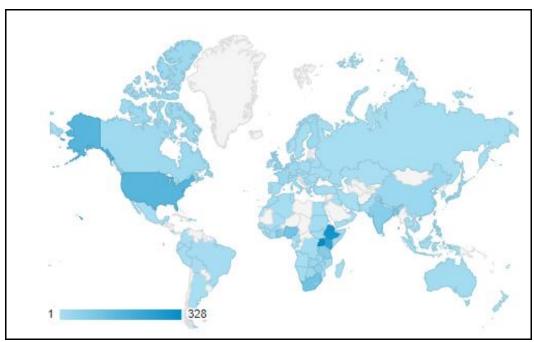
RUFORUM participated in SmartAfrihub online Hackathon which took place in May 2020. The Hackathon led to the development of an open online platform bringing together academicians, private companies and other actors in the agricultural sector to co-innovate.

Discussions with GODAN and Open Source Geospatial Foundation (OSGeo) were held to prepare a Webinar on Open GIS software for students and staff. Preparations for the Webinar are in advanced stages and will be held in the first quarter of the FY 2020/2021

e) Undertake analytics of data in the RUFORUM Institutional repositories for use by various stakeholders

The RUFORUM institutional repository was linked to Google analytics. During the quarter, the repository registered 2,266 users with 2,193 new users. Based on this, the website returning rate is 13.1% which shows the need to upgrade the website to address stakeholder information needs. The global distribution of users is shown in the map below:





Global distribution of users of the RUFORUM institutional repository

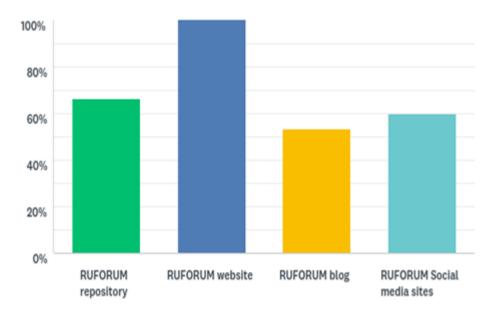
f) <u>Promote publication of Africa's research outputs in the African Journal of Rural Development</u> and other related publications

RUFORUM published Volume 5 (issue 1) of the African Journal of Rural development (AFJRD) focusing on profiling the status of the Higher Education and ST&I sectors in selected African countries, namely, Ghana, Liberia, Mali, Mozambique, Sudan and Uganda. Other similar studies have been initiated in DR Congo, Ethiopia, Namibia, South Sudan and Zambia. These studies will inform RUFORUM interventions in the different countries. Plans are underway to produce policy briefs to be shared with the target countries and for sharing globally. Part of the emphasis is to document the participation of women in ST&I, including in training, job employment and leadership. Volume 16 of the RUFORUM Working Document Series was also published.

g) Examine the knowledge priorities of the network stakeholders

The ICT Capacity and Knowledge priorities study of the RUFORUM Network was finalized during the quarter. Results indicate that the rate of access to RUFORUM knowledge products varied across the 20 institutions that responded. One hundred percent (100 %) often access the website, 67% have access to the repository, 60% have access to social media sites, and 53% often access the blog as shown in the figure below.





Access to RUFORUM knowledge products

Emerging lessons and issues

The RUFORUM webinars are key in galvanizing dialogue between higher education institutions and other stakeholders in the agricultural and higher education space.

Flagship programme: PROGRAM SUPPORT – Technical, administrative and logistical support

a) Convene the 15th RUFORUM Annual General Meeting (AGM), meetings of the Board and its committees- the Finance and Administration Committee, International Advisory Panel (IAP), Technical Committee (TC) and the Committee of Principals and Deans to guide the network to fulfil its corporate mission

During the quarter, RUFORUM convened two Governance meetings including the 19th Board Executive Committee meeting and the 27th Finance and Administration Committee using the Zoom Conferencing Platform. The aim was to receive and consider updates from the Secretariat on RUFORUM progress and policy matters. The two governance organs approved and recommended the convening of the 16th RUFORUM AGM virtually in October 2020. Further, strategies for the smooth implementation of Network operations amidst the COVID 19 Pandemic were explored and agreed upon.

b) <u>Establish strategic partnerships - strategic alliances with other organizations to create common</u> values and mission



RUFORUM formalized and is exploring partnership with several institutions including:

- i. National Agricultural Research Organisation of Uganda (NARO) to support post-doctoral and doctoral researchers in Uganda;
- ii. International Institute of Tropical Agriculture (IITA) to support attachment of students supported under the TAGDev programme to the IITA projects;
- iii. Dutch Organization for Internationalization in Education and the Food and Business Knowledge Platform to undertake a review of agricultural TVETs focusing on linkage with universities, private sector, farmers and policy in Africa and learning from the experience in Netherlands;
- iv. African Union Commission to review the impact of COVID-19 food and nutrition security and sustainable agriculture;
- v. RUFORUM and FAO initiated processes to undertake capacity development for young family farmers and graduate students on agricultural innovations for family farmers in Eastern and southern Africa;
- vi. African Development Bank to operationalize the Sharing Innovations and Experiences from Korea for Higher Education Transformation in Africa (SIKET) project. This will among others include two incubation hubs, entrepreneurship training and support to the RUFORUM online platform; and,
- vii. Arab Bank for Economic Development in Africa (BADEA) to fund Feasibility study for Youth Employment, Entrepreneurship and Agro-innovations Development in Uganda, as part of the implementation of the continental initiative-Strengthening Africa's Science, Technology and Innovation for Entrepreneurship Capacity for Agriculture and Economic Development (SASTIE). The procurement process for the consultancy firm to undertake the feasibility study has been completed and a no-objection for contract negotiation has been received.

c) <u>Support University research teams to prepare and submit at least 30 proposals to support university-level activities</u>

RUFORUM mobilized 23 research teams to submit proposals to the 2020 Intra-Africa Academic Mobility Call for proposals. Proposals were developed for training in: agriculture and food security; veterinary sciences; environmental management, climate change and forestry; Science, Technology, Engineering and Mathematics (STEM); Information and Communications Technology (ICT); Economics, business and finance; Education Sciences; and, Health Sciences.

d) Prepare and submit at least 10 proposals to support implementation of the RUFORUM Vision 2030

During the period, several proposals were submitted to various development agencies focusing on AfriDAP; University Engagement to Support Human Capital Development, Youth Employability and Entrepreneurship for Agricultural Transformation in Africa (HEEAT).



Emerging lessons and issues

Despite the restrictions in mobility imposed by the COVID 19 pandemic, utilization of on-line technologies has made it possible to convene two RUFORUM Governance meetings, the Finance and Administration Committee and the Board Executive Committee. Secretariat has mainstreamed COVID-19 Standard Operating Procedures recommended by Government into its operations. At a Strategic level, the Secretariat has proposed four overarching thrusts for universities and their partners to consider for responding to COVID-19 Pandemic and other challenges, and for repositioning universities for better respond to future challenges (Link). Discussions on these suggestions are part of the 14 Webinars organized by the RUFORUM Secretariat.

Planned activities for the next quarter FY 2020/2021

- 1. Recruit and support students for academic programmes in agricultural sciences, and design and roll-out online adapted academic training programmes in Gulu University, Uganda and Egerton University, Kenya under the TAGDev Flagship.
- 2. Support community action research teams of supported students and faculty at selected universities to engage with communities to strengthen commodity value chains for smallholder farmers.
- 3. Support Regional Academic Mobility for students, and academic and administrative Staff to strengthen inter-regional, inter-cultural exchange and collaboration in the field of higher education and research in Africa.
- 4. Support RUFORUM Postgraduate students and Post- Doctoral Fellows undertake thematic research to strengthen agri-food systems, inclusivity and environmental sustainability issues.
- 5. Foster dialogues on emerging global issues for collective action with specific focus groups for a needs-oriented network through webinars.
- 6. Hold Audit and Board Executive Committee meetings to consider the 2019/2020 Audit report
- 7. Facilitate the Uganda-BADEA supported study on Youth Employment, Entrepreneurship and Agro-innovations Development in Uganda
- 8. RUFORUM Secretariat in partnership with Wageningen University and Research to undertake a study on Implications of the recent EU-AU Policy Documents on the EU-AU Food and Nutrition Security Roadmap.