



Regional Universities Forum for Capacity Building in Agriculture Secretariat Quarterly Report

1st January- 31st March 2021

Summary

This report highlights key achievements and progress made during the period 1st January-31st March 2021 (the third quarter of the Financial Year 2020/2021, and the third year of implementing the <u>operational</u> <u>plan</u>-2018-2022 of RUFORUM <u>Vision 2030</u>). The Operational Plan is designed around four (4) flagship programmes underpinned by activities to support regional collective action and learning to give stimulus to achieving the RUFORUM vision for *vibrant transformative universities catalysing inclusive agricultural development to feed and create prosperity for Africa.* The four flagship programmes are:

- Transforming African Agricultural Universities to meaningfully contribute to Africa's Growth and Development (TAGDev) 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. This flagship programme is largely supported by the Mastercard Foundation.
- 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.
- 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.
- 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.

Below are the highlights of progress made across the flagships:

- a) RUFORUM strengthened engagement in new forms of partnerships at national, regional and continental level to support research and development; and, strengthen higher education and agricultural sectors on the continent. This included engagements with several agencies in the Gulf States.
- b) The Republics of Benin and Cameroon signed the RUFORUM Charter, bringing to total eight African Nations along with eSwatini, Ghana, Liberia, Mali, Sierra Leone and Zimbabwe.
- c) RUFORUM with support from the African Development Bank awarded two Entrepreneurship Challenge Programme (RECAP) grants to Mbarara University of Science and Technology (Uganda) and University of Sine Saloum El-Hâdj Ibrahima NIASS (Senegal) to strengthen Agrientrepreneurship training.
- d) RUFORUM was awarded a grant of US\$ 330,000 from the Arab Bank for Economic Development in Africa to operationalize its African Digital Agriculture Programme (AfriDAP)

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which, amongst others, aims to strengthen Online Learning and Teaching in its Member universities.

e) The Secretariat developed the RUFORUM Post COVID 19 strategy to enable member universities respond, recover and build resilience in the medium term.

INTRODUCTION:

The narrative below expounds the achievements made during the period 1st January- 31st March 2021, the third quarter of the financial year 2020/2021. The report is arranged by Flagship Programmes of the RUFORUM <u>Vision 2030</u>.

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

a) Design and roll-out online adapted academic training programmes at early adopter <u>universities</u>

To-date, a total of ten academic programmes, four at Gulu University (MSc. Food Security; MSc. Agri-business Development; MSc. Animal Production & Marketing; and, MSc. Environment & Natural Resource Management) and six at Egerton University (MSc. Agri-business Management; MSc. Soil Science; MSc. Horticulture; MSc. Food Science; MSc. Animal Nutrition; and, MSc. Agricultural Extension) have been converted into online delivery courses to enable students undertake learning virtually.

b) <u>Recruit students to complete graduate studies in agricultural sciences in Gulu</u> <u>University, Uganda and Egerton University, Kenya</u>

The Secretariat advertised <u>calls</u> for cohort V students to undertake studies with support from the Mastercard Foundation. The scholarship targets 30 (50 % female) academically deserving yet economically disadvantaged, marginalized communities and those coming from conflict and post conflict areas of Africa. For ongoing cohorts of students, 22 students completed studies at Bindura University of Science Education (7), Egerton University (12), and Gulu University (3), bringing to total 55 students (40 masters, 15 undergraduate) that have so far graduated. Under the Mastercard Foundation support to RUFORUM, a total of 402 (25 PhD, 195 Masters, 182 undergraduate) students continue undertaking studies in various universities across Africa. During the COVID 19 lockdown period that restricted face-to-face engagements, students devoted time to undertake <u>social responsibility</u>.

- c) Support community action research teams of supported students and faculty at each university to engage with communities and strengthen commodity value chains for smallholder farmers Research teams implementing community action research programme (CARP+) projects in Botswana, Benin, Ghana, Kenya, Namibia, South Africa, Sudan, Uganda and Zimbabwe continued to develop technologies, innovations and management practices, some of which have been adopted by public and private sector entities and further disseminated by Civil Society Organizations to other institutions and beneficiaries. For instance, the local rice seed business of farmer groups engaged by Gulu University in Uganda has been adopted by the Ministry of Agriculture, Animal Industry and Fisheries, Uganda and further disseminated by the Integrated
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Seed Sector Development (ISSD) programme, HarvestPlus, Local Governments, and the national Operation Wealth Creation to smallholder farmers programme.



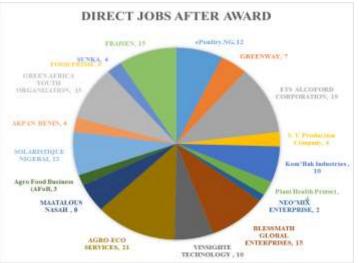
Local rice seed business of in Gulu district, Uganda

d) <u>Support the development, scaling-up and commercialisation of innovations emerging from</u> agribusiness incubation centres for greater impacts

Students supported under the RUFORUM Entrepreneurship Challenge Programme (RECAP) continued to develop innovations during the reporting period. Demand for products and

profitability of the student enterprises was greatly affected by COVID-19 pandemic lockdown. In some enterprises, cases of diversification and developing alternative products relevant to COVID-19 have emerged. Examples include <u>vitamin C</u> laden fruit juices in Uganda.

The Secretariat has tracked progress of the fifty eight (58) young entrepreneurs awarded in 2016, 2018 and 2019 under the RUFORUM Young African Entrepreneurs Competition (RUYAEC) and established that, the awardees have generated a total of US\$ 826,850; created 165 and 400 direct and indirect jobs



respectively; and, engaged 100,000 smallholder farmers. This provided proof of concept with potential for employment and motivation of youth in agriculture.

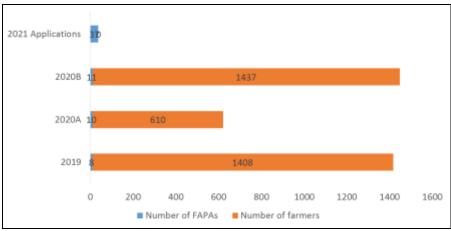
e) <u>Support Student field attachment to communities and mentorship for Cohort I, II, III and IV</u> <u>undergraduate and Cohort II and III post-graduates</u>

Placement of students for internship continued during the reporting period. Six students are currently undertaking internship at Nakuru Smallholder Farmers Association (NASFA) in Kenya, and others are attached to the International Institute of Tropical Agriculture (IITA) in

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Nigeria and Uganda. These students have engaged approximately 3455 smallholder farmers in Benin, Ghana, Kenya, Uganda and Zimbabwe.



Farmers engaged under the Field Attachment Programme Awards

f) Document, synthesize and share lessons emerging from the TAGDev programme

During the quarter, several storylines emerging out of student's research were published amongst which included;

- i. Nector Soft Drinks in Northern Uganda (https://ruforum.wordpress.com/2021/03/22/nector-soft-drinks-in-northernuganda/)
- ii. Transforming my community through vegetable farming and sensitization (<u>https://ruforum.wordpress.com/2021/03/22/transforming-my-community-through-vegetable-farming-and-sensitisation/</u>)
- iii. <u>Convergence of the Action Research Program and producer groups' business</u> models: the case of two rice producer groups in Nwoya and Amuru districts (https://ruforum.wordpress.com/2021/03/18/convergence-of-the-actionresearch-program-and-producer-groups-business-models-the-case-of-two-riceproducer-groups-in-nwoya-and-amuru-districts/)

Emerging lessons and issues

- 1. Collaborative engagement of communities in agricultural research offers opportunity for Universities to broker and operationalize Public-Private Partnership to address key challenges in agricultural value chains. By attracting congruent partners, broadening the partnering spaces and mutual contribution to shared value creation, interventions that align with existing or emergent producer groups' business models are likely to succeed.
- 2. Agribusiness enterprises must be flexible to adjust to changing circumstances. The COVID 19 pandemic presented various opportunities that necessitated students to tailor their production towards disinfectants and nutritious foods vital for boosting body immunity.



Flagship programme: CREATE-Cultivating Research and Teaching Excellence

a) <u>Facilitate Academic Staff Development (ASD) Graduate Teaching Assistantship (GTA)</u> <u>programs</u>

Under the Graduate Teaching Assistantship Programme (GTA), 15 students (3 female, 12 Male) from Benin (1); Botswana (3); Ghana (3); Kenya (4); Liberia (1); Namibia (2); and Nigeria (1) were facilitated for RUFORUM member university staff placements to undertake PhD studies in other universities. This brings the total to 143 (43 female, 100 male) GTA students undertaking studies in universities across the continent. To-date seventeen (17) GTA students have completed doctoral studies in different universities and returned to build capacity in their respective home-countries.

b) <u>Support Regional Academic Mobility for academic and administrative Staff in Africa to</u> promote access to quality academic programmes, strengthen inter-regional, inter-cultural exchange and collaboration in the field of higher agricultural education and research

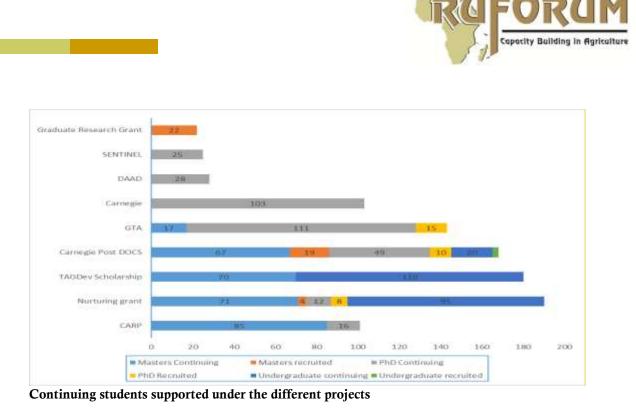
During the quarter, following <u>adverts</u> for the mobility call under the five-year CoSTClim (Collaborative Action for Strengthening Training Capacities in Climate Risk and Natural Resource management) project, four (4) students from Makerere University were competitively selected from a pool of 17 applications to undertake a three-months academic mobility at the Norwegian University of Science and Technology (NTNU). This project is implemented by a consortium of RUFORUM, Makerere University, Uganda Martyrs University and Norwegian University of Science and Technology.

c) <u>Support participation of women in science and technology-related training and research</u> <u>activities in all institutions benefiting from RUFORUM schemes</u>

RUFORUM continues to provide opportunities for women participation in science, technology and innovation (ST&I). Guidelines for student recruitment, award of grants and scholarships continue to emphasize support for female students. This enables RUFORUM advance gender-responsiveness as the norm and standard for higher agricultural research and training. Out of the 78 Masters and PhD students recruited, 46 % are women.

d) <u>Provide opportunities for Doctoral training to increase the pool of science, technology and</u> <u>innovation (ST&I) leaders in Africa with a focus on fragile States</u>

During the quarter, as part of escalating doctoral training in Africa, the Secretariat recruited 33 additional PhD students for support under the Graduate Teaching Assistantship; Carnegie Post-doctoral fellowships; and, nurturing support from RUFORUM to undertake studies in African universities. Further, as part of maintaining the education pipeline 45 Masters students were recruited with support from the Global Research Alliance, Carnegie Corporation of New York and RUFORUM Nurturing Grant support.



The Secretariat also published storylines capturing students' experiences in higher education including;

- The scholarship from RUFORUM has expanded my research capabilities and network
- I have benefited a lot from skills enhancement trainings organized by RUFORUM
- My research fieldwork in a foreign country has been a life changing experience
- Amidst the challenges, I am still on course to finish my PhD studies
- I have spread my wings through RUFORUM scholarships
- <u>The journey to my PhD programme begun with my involvement in the SENTINEL Project</u>
- My PhD research to tackle trade-offs in woodlot management in North-Western Ethiopia
- I want to contribute to climate change resilience in Sudan through my PhD research
- <u>RUFORUM has given a lifeline to My PhD journey</u>
- <u>Studying forestry made me realise my destiny</u>

e) Support postgraduate training and research for small and fragile states

Currently 201 students from 10 fragile States are being trained including from: Burundi (2); Cameroon (3); Congo Republic (3); DR Congo (40); Liberia (19); Nigeria (23); Somalia (2); South Sudan (2); Sudan (93); and Zimbabwe (14) pursuing PhD (94) and Masters (107) studies in the different RUFORUM Member universities. In addition, 16 undergraduate students from five fragile States (Cameroon, DR Congo, Liberia, Nigeria and Zimbabwe) are supported under different RUFORUM scholarship programmes. RUFORUM is further working with Nugaal University in Somalia to strengthen Higher Education in Somalia through developing Graduate Programmes at the University with technical backstopping from Egerton and Gulu Universities.

f) <u>Support students to share research findings, obtain mentorship support and skills enhancement</u> During the quarter, the Secretariat undertook a scoping study to establish skills gaps amongst supported doctorate students. The findings indicated deficiencies in scholarly writing,

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econometric models, GIS modelling, and qualitative data analysis. Subsequently, a skills enhancement training focusing on thesis and article writing and systematic reviews was undertaken by facilitators from University of Reading and University of Oxford under the auspices of the Social and Environmental Trade-offs in African Agriculture (<u>SENTINEL</u>) project. One hundred students participated in the training.

g) Support RUFORUM Post- Doctoral Fellows undertake thematic research to strengthen agrifood systems, inclusivity and environmental sustainability

RUFORUM continued to support the implementation of the Post-Doctoral Fellowships programme. Under the Fellowship programme involving 10 Fellows, 19 MSc and 10 PhD students have been enrolled for training under the programme and received orientation support to ensure smooth progress in academics. The Secretariat continued to track progress of the Post-Doctoral Fellows.

h) <u>Support thematic research to strengthen agri-food systems, inclusivity and environmental</u> <u>sustainability</u>

Following the award of eight Graduate Research Grants with support from the Global Research Alliance, 22 (14 female, 8 male) masters students were awarded scholarships to conduct applied research related to the measurement and management of greenhouse gas emissions and removals in pastoral and agro-pastoral ruminant livestock farming systems in Africa. This responds to the goals established by the Paris Agreement on Climate Change, the 2030 Agenda for Sustainable Development, as well as national and regional priorities of African States.

Emerging lessons and issues

- 1. Due to travel restrictions imposed as a result of the COVID 19 pandemic, staff exchanges and academic mobility have been challenging to implement. As such we are using Online Teaching and Learning involving experts from different parts of Africa.
- 2. The demand for both doctoral and postdoctoral opportunities outweigh the opportunities available. Concerted efforts for resource mobilization and innovative engagements have to be explored by all stakeholders.

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

a) <u>Integrate RUFORUM online platforms to facilitate and enhance systematic access to</u> information. These platforms include: Higher Agricultural Education Capacity Indicators portal and database, Online Impact Portal and platform, Ideas Bank, Management Information System, Knowledge Repository, Website and Blog, and digital communication and social media platforms

RUFORUM continued to strengthen its online platforms to facilitate monitoring and evaluation, knowledge access and information dissemination across the network. The following platforms have been developed or upgraded;

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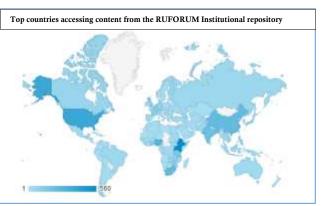
- i. The RUFORUM Website: The RUFORUM website (<u>www.ruforum.org</u>) has been made more robust with additional fields to widen the user-base and, further enhance content visibility across the globe.
- ii. The <u>RUFORUM SME Hub</u> has been developed to handle applications for young innovators; enable learning from experienced mentors from different business fields; facilitate access to free business tools to manage businesses professionally; showcase businesses to a mix of investors with access to real time business data; and, engage and find investment for business ventures.
- iii. The revamped <u>RUFORUM Information Management system</u> continues to support monitoring, evaluation and reporting with user requirements especially University Principal Investigators and RUFORRUM Secretariat Staff continuously incorporated.
- b) <u>Facilitate the establishment of customized user-friendly Virtual Learning Environments "Moodle</u> <u>Platforms" to enable universities provide relevant and practical training using the latest electronic</u> <u>means to deliver and enhance the student learning experience</u>

RUFORUM initiated dialogue with Commonwealth of Learning (COL) to strengthen e-learning within the RUFORUM Network through capacity building workshops for sharing insights on the implementation of Massive Open Online Courses called AgMOOCs; training academic and non-academic staff on advancing scalable online courses; and, development and delivery of AgMOOCs for students and staff.

c) <u>Strengthen knowledge use through dissemination of knowledge products and services, providing easy-to-access on-time information and using specific feedback mechanisms to gauge client satisfaction.</u>

To keep Network members informed of developments and opportunities relevant to agricultural higher education in Africa, 12 editions of <u>RUFORUM Weekly digest</u> were released during the reporting period; publications in the <u>RUFORUM Working</u> <u>Document series</u> and the <u>RUFORUM Institutional repository</u>.

The Secretariat further shared outputs from Africa's research and practice both from within and outside the RUFORUM Network through the <u>media monitoring</u>



reports; press releases; and, the RUFORUM blog currently reaching an audience of 16,527 users.

Emerging lessons and issues

Partnerships will continue to be the lever for access to online and other resources for the resilience of higher education and response to the challenges generated by COVID-19.

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

- a) <u>Support broker alliances and partnerships to assist universities establish delivery networks for scaling-up</u> research outputs, knowledge products and innovations
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RUFORUM signed a Memorandum of Understanding (MoU) with the American University of Beirut (AUB) through its Faculty of Agricultural and Food Sciences (FAFS) a to provide a framework for collaboration in several areas including but not limited to staff exchanges, research, teaching, training and academic dialogue on issues related to relevant and quality higher education, agriculture, food systems, poverty reduction and global development

- b) <u>Prepare and submit at least 10 proposals to support implementation of the RUFORUM Vision 2030</u>
 - During the quarter, the Secretariat developed and submitted proposals to various agencies to strengthen human capital development; foster resilience to emerging challenges in Africa including climate change; foster youth entrepreneurship; enhance access to education for disadvantaged communities; and develop digital technologies for Agriculture. These efforts resulted into award of US \$ 330,000 from the Arab Bank for Economic Development in Africa to operationalize the RUFORUM African Digital Agriculture Programme (AfriDAP). The AfriDAP programme has three thrusts namely Digital learning and sharing technologies; Data Science development; and Digital agriculture. The current support from BADEA will specifically support strengthening Online Teaching and Learning, including establishment of a regional elearning platform at RUFORUM Secretariat. Additionally, as an outcome of the decisions of Africa's Ministers of Agriculture, Education and Science, Technology and Innovation meeting taken during the 2019 RUFORUM Annual Meeting in Cape Coast Ghana, BADEA is funding a pilot Feasibility study on Youth Entrepreneurship and Skill development for the agricultural sector in Uganda. It is hoped that this will expanded to other countries.
- c) <u>Recurrent Secretariat operations while mainstreaming operations in line with COVID 19</u>

To respond, recover and build resilience in the medium term in response to the COVID 19 pandemic, RUFORUM developed the Post COVID-19 strategy to exploit the vast opportunities created and as well address the challenges posed by the COVID 19 pandemic. The strategy emphasizes stabilizing higher education delivery through leveraging network strengths, exploring and enhancing alternative modes of pedagogy and academic delivery; stabilizing food security in a transforming agri-food system across the value chain; and, supporting youth entrepreneurs to recover, rebuild and scale innovative enterprises.

Planned activities for the period April-June 2021

Activities under the RUFORUM <u>operational plan</u>-2018-2022 of RUFORUM <u>Vision 2030</u> flagship programmes will continue. Specific focus will be made to:

- 1. Recruit the 5th and last Cohort of students to undertake Masters studies at Gulu and Egerton Universities with funding support from the Mastercard Foundation
- 2. Participate in the UN Food Systems Summit 2021 Champions Network and independent dialogue
- 3. Undertake resource mobilisation for the RUFORUM Network
- 4. Continue with advocacy for the RUFORUM Network
- 5. Plan for the 7th RUFORUM Triennial Conference scheduled to be held in Benin in 2021
- 6. Support short skills enhancement trainings for University academics
- 7. Support students transitions to work; trainings on preparation for transitions
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- Explore ways to operationalize the RANCH flagship programme
 Convene Governance Organs meetings