

RUFORUM SUMMARY ANNUAL PROGRESS AGAINST TARGETS FOR THE FINANCIAL YEAR 2019/2020

Summary

The Regional Universities Forum for Capacity Building in Agriculture, a network of 126 universities in 38 countries across Africa was established 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, and governments'. The Vision 2030 for the network envisages "Vibrant, transformative universities catalysing sustainable, inclusive agricultural development to feed and create prosperity for Africa." This briefing Note provides a narrative of achievements made against the targets set for the financial year 2019/2020 as presented to the 15th Annual General Meeting held on Friday, 6th December, 2019 at the New Examination Centre, University of Cape Coast, Ghana.

Below are the key achievements against targets aligned to the Flagship programs of the RUFORUM Operational Plan 2018-2022 of the RUFORUM Vision 2030 for the Financial year 2019/2020.

TAGDev-Transforming African agricultural universities for Africa's growth and development

- 1. Seven short courses were undertaken to strengthen agribusiness training in TVET institutions in partnership with the Universities with emphasis on soft skills to 455 participants at various academic levels.
- 2. Two hundred and eighty four (284) students were recruited at PhD, MSc, BSc and TVET to train Africa's new age of development practitioners and cadres
- 3. Fifteen (15) agribusiness incubation hubs were supported to become fully operational and 624 students were engaged in the incubators
- 4. Three hundred and forty- eight (348) MSc and BSc students were supported to undertake field attachment for experiential learning and further enhance the delivery of complimentary agricultural advisory services
- 5. Sixteen (16) Community Action Research Programmes are operational in 11 countries, reaching 156,000 indirect beneficiaries and 21,134 farmers (direct beneficiaries).
- 6. Professional capacity of university and TVET staff at Egerton and Gulu Universities and associated partners in Kenya and Uganda were strengthened to implement new and revised curricula and education models across the education value chain.



Regional Anchor Universities for Higher Agricultural Education - RANCH

1. A total of 90 student enterprises were supported under the RUFORUM Entrepreneurship Challenge Program (RECAP) to secure trademarks, 30 start-ups are independent and operational outside the universities while others adopted the industrial park/incubation model for production and points of sale within the universities. Forty-six (46) jobs have been created and five FAPA-business projects have been commercialized.

Cultivating Research and Teaching Excellence- CREATE

- 1. Fifty-six (56) additional placements of teaching staff in Member Universities were undertaken bringing the total to 129 Graduate Teaching Assistants (GTA) (88 male, 41 female) from 37 Universities successfully placed in 25 universities. Two hundred and eighty-nine (289), (217 male, 72 female) academic Staff from 35 Universities are still awaiting placement. The target is to train 325 PhDs by 2022. To date 9 GTAs have graduated from their respective universities
- 2. RUFORUM Post- Doctoral Fellowship Programme- continued with the 19 post-doctoral fellowships supported by the Carnegie Corporation of New York. A total of 138 students (PhD 51; MSc 67 and BSc 20) are enrolled under the programme. A new two-year grant will support research for 42 Graduate Teaching Assistantships, 10 Post-Doctoral fellowships, and 10 Staff exchanges and mobilities within RUFORUM member universities.
- 3. As part of escalating doctoral training to increase the pool of science leaders in Africa 814 students are currently in the system of whom 295 are PhDs. Thirteen (13) PhD students graduated this year. The student profile includes postgraduate students from fragile States and other disadvantaged communities- Two hundred and three (203) students (114 Male, 90 female) from conflict and post conflict countries are currently pursuing studies.
- 4. Six country studies (Uganda, Sudan, Liberia, Mali, Ghana and Mozambique) to establish the status of participation of women in Science, Technology and Innovation (ST&I) in Africa were undertaken. The case studies provide baselines that will be used to measure progress on the interventions to increase the participation of Women in Science, Technology and Innovations. Five others will be undertaken during the 2020/21 period (DR Congo, Ethiopia, Namibia, South Sudan and Zambia).

K-Hub-Knowledge Hub for University Networking, Partnership and Advocacy

- 1. National Forums were hosted in <u>Mali</u> (9-14 September 2019) and <u>Zambia</u> (23-25 September 2019).
- 2. The Secretariat revamped its Information Management System (RIMS), which is currently hosted with Amazon Web Services (AWS)
- 3. The Secretariat continued with dissemination through Voices from the field, Weekly newsletter, News Digest, Publications & Manuscripts



- 4. The Secretariat supported 294 students (199 male, 95 female) to attend the 15th Annual General Meeting in Cape Coast Ghana. The Students participated in Sill enhancement trainings on Scientific data Management, Research Proposal development, Scientific writing training, Interdisciplinary and partnership management and they also preoral presentations in the scientific sessions.
- **5.** The Secretariat the third Young African Innovators competition where 20 innovators from West Africa received awards, and also three upcoming Ghana scientists were recognized and awarded prizes.

Governance and Member University Support Systems

- 1. The Secretariat convened the 15th RUFORUM Annual General Meeting (AGM) in Cape Coast Ghana, and meetings of the Board and its committees including the International Advisory Panel (IAP), Technical Committee (TC) and the Committee of Principals and Deans to guide the network to fulfil its corporate mission. A total of 1003 (701 male, 302 female) participants from over 50 countries including Policy Makers, University Leaders, development partners, staff and students participated. Also, 18 new member universities were admitted and a new RUFORUM Deputy Board Chair, Prof Theresa Nkuo-Akenji, Vice Chancellor, University of Bamenda, Cameroon was elected.
- 2. A meeting of RUFORUM partners under the theme *Promoting Equal Opportunity in Youth Employability and Entrepreneurship in Africa* was held 30 September- 1 October 2019 in Cape Coast Ghana to explore opportunities of synergy and partnerships for youth in agriculture.
- 3. RUFORUM hosted a joint meeting involving African Higher Education and research actors (such as the Forum for Agricultural Research in Africa) actors and counterparts in Europe, China, Korea, Latin America and USA on 2nd December 2019 to foster collaboration in Higher Education and research in Africa.
- 4. Secretariat support university research teams to develop proposals in response to ERASMUS+, EU/AU intra Africa mobility and other calls to support university-level activities
- 5. The financial year 2018/19 External Audit report was approved by the 15th RUFORUM Board Meeting held on 6th December 2019 at Cape Coast, Ghana

Emerging Issues and challenges

Whilst the achievements against the set targets as outlined in the flagship are commendable there remains challenges and issues that merit attention.

1. The Regional Anchor Universities (RANCH) flagship has not been implemented according to expectation. The SHAEA project by the World Bank is yet to take off and alternative attempts to establish Centres of Excellence are yet to materialise. One such initiative will be the SASTIE program for which a feasibility study is being supported in Uganda as the pilot.



- 2. The Bill and Melinda Gates Foundation support for program support will end July 2020. This will reduce significantly the Secretariat core funding
- 3. The GTA target is 325, to-date only 133 have been placed, with varying levels of access to facilities and resource modes. There are currently more than 289 students awaiting placements
- 4. The COVID-19 pandemics and its aftermath has curtailed several activities, and the associated financial meltdown will immensely affect RUFORUM Secretariat and Member Universities operations

It will therefore be important to:

- 1- Explore and identify alternative sources of financing and or modes of engagement with resource providers.
- 2- Foster continuous engagement with policy makers, development partners and other stakeholders for buy in and to support RUFORUM operations, and indeed the broader Higher Education, Science, Technology and Innovation advancement in the continent.
- 3- Develop a marketing and advocacy strategy based on the key achievements to reach out to all stakeholders for programmatic support.

The detailed annual progress against the targets outlined in the Annual Operational Plan by Flagship is provided in the table below

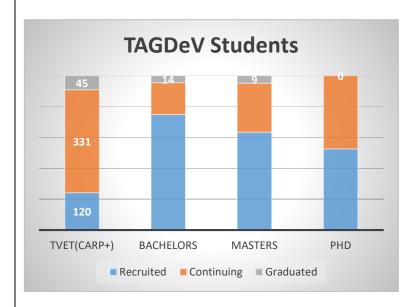
- 1. Flagship Programme: TAGDev-Transforming African agricultural universities for Africa's growth and development: This flagship is focused on attracting and supporting youth into agricultural education to acquire skills for employability and entrepreneurship is implemented with support mainly from the Mastercard Foundation.
- 1.1 Deliver 4 short courses to strengthen agribusiness training in TVET institutions in partnership with the Universities with emphasis on soft skills

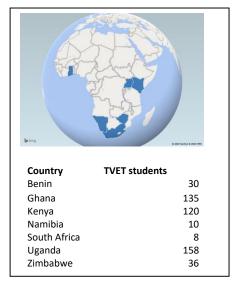
Seven (7) short courses were delivered

- 1. **Personal finance, entrepreneurship and preparation for retirement: 89** (42 academic and non-academic staff of Egerton University and Gulu University (47)
- 2. Proposal development and scientific data management: 91 students (37 graduate students at Egerton University and 54 at Gulu University)
- 3. Entrepreneurship and business development: 50 BSc MSc and 20 MSc-Delivered during Orientation at Egerton
- 4. Entrepreneurship-embedded training: 40 trainers (19 from Northern Uganda Youth Development Centre and 21 from Baraka Agricultural College)
- 5. Communication, networking and advocacy: 18 Staff from Baraka Agricultural College



- 6. Competitive grants development: 47 Staff from Baraka Agricultural College
- 7. **Agripreneurship and incubation training: 120** out of school Youth trained in market-oriented vegetable production in Northern Uganda
- 1.2 Recruit students (PhD, MSc, BSc and TVET students) to skill Africa's new age of development practitioners and cadres





- 1.3 Scale-out agribusiness incubation centres and accelerators at selected BTVET institutions, universities and communities to engage Africa's college educated youth in innovation and investments in agriculture
 - a) Fifteen (15) agribusiness incubation hubs are fully operational and supporting 624 students including at University of Abomey-Calavi-100, University of Burundi-48, Université Catholique de Bukavu-27, University of eSwatini-66, University of Cape Coast-40, Egerton University-32, Bishop Stuart University-116, Busitema University-50, Uganda Christian University-7, Gulu University-88, and Ndejje Unuiversity-50.
- 1.4 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 Programme Awards (FAPA)
 - a) Supported 302 students at Egerton University (148) and Gulu University (154) to undertake field/farm attachment for a period of 10-12 weeks. They worked with at least 5,500 smallholder farmers, 58 institutions and farmer groups in Kenya and Uganda.
 - b) Thirteen (13) MSc students were supported to undertake field attachment under the RUFORUM Field Attachment Programme Awards (FAPA). Eight (8) of these worked with communities in Northern Uganda; two (2) were attached to the African Union Commission under the Oversees Volunteer Programme; and three (3) were attached to the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)-Nairobi.
 - c) Supported 33 students (27 undergraduates and six Masters) from Egerton University, Uganda Christian University Mukono, and Bayero University Kano to undertake field attachment in Kenya, Uganda and Nigeria respectively under the CGIAR Research Program on Grain Legumes



and Dryland Cereals (CRP-GLDC) supported by the International Crops Research Institute for the Semi-Arid Tropics (*ICRISAT*). The attachment enhanced the students' technical agricultural skills and enabled them to obtain insight into farmers' indigenous knowledge.

1.5 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

- a) Continued to support implementation of the 16 Community Action Research Programmes operational in Benin (Baobab value chain); Kenya (Cassava, Potato value chains); Uganda (Rice, Pig and Potato value chain); Ghana (Pineapple value chain); Zimbabwe (Water Harvesting value chain); South Africa (Wool value chain); Botswana (Safflower value chain); Namibia (encroacher bushes value chain); and, Sudan (Honey Bee, Natural Resources Management, vegetable and non-timber products value chains.
- b) Cumulatively, the Community Action Research Programme (CARP) projects have engaged 156,000 indirect beneficiaries and 21,134 farmers (direct beneficiaries). Key outputs include:
 - a. policy briefs to regulate the standards for potato plant health, packaging and pricing of potato and potato seeds in Kenya; rapid propagation of seed potato using apical rooted cuttings-a departure from the conventional multiplication using tubers; certified seed potato production unit;
 - b. <u>Fruition Crushed</u>, a value addition enterprise at University of Cape Coast producing juices from pineapples by the project and farmers engaged in the project implementation;
 - c. Incubation of eight student enterprises along the cassava, guava and bee value chains at University of Nairobi.

1.6 Synthesize and publish lessons emerging out of the delivery implementation of CARP+ and RECAP

- a) Published three issues of the Voices from the Field including <u>Insights from research-development: labs to markets</u> experiences and lessons from the Baobab value chain in Benin implemented by University of Abomey-Calavi; <u>Enhancing Potato and Cassava value chains performance</u>" exemplifying how Egerton university is stimulating cassava producers to link directly with the breweries for commercial cassava production; and volume 2 of <u>Voices from the field</u> highlighting efforts undertaken by Egerton university research teams in facilitating quality seed potato production and increasing its uptake among smallholder farmers.
- b) Mobilized 17 manuscripts and 14 feature stories from Principal Investigators and students as part of disseminating models and lessons from the implementation of the various projects supported through the TAGDev flagship.

1.7 Develop the professional capacity of university and TVET staff to implement new and revised curricula and education models

- a) At Baraka Agricultural College in Kenya, a National level 4 and 5 Competency Based Curriculum in Piggery was developed. The previously developed occupational Standards were translated into a fully-fledged curriculum.
- b) Supported entrepreneurship and market place training of 88 Principals and Deans during the 15th RUFORUM Annual General held at the University of Cape Coast, Ghana. The training was designed to enhance the transformation agenda in entrepreneurship and catalysing the development of the entrepreneurship ecosystem in Africa.



c) Trained 35 academic staff at University of eSwatini in entrepreneurship to support agribusiness incubation training at the University.

1.8 Finalize a book on agricultural tertiary education in Africa

- a) Progress on the book on agricultural tertiary education continues albeit at a slower pace than expected.
- b) Developed a draft manuscript of the TAGDev stories of young Africans sowing Agrientrepreneurship in African Universities. The book comprises eight chapters documenting the stories and experiences of TAGDev supported students at Gulu and Egerton University that are undergoing training as agricultural change makers.

1.9 Explore opportunities for targeted support to strengthen lower levels of education value chains and for increasing youth employability

- a) RUFORUM awarded a nurturing grant to <u>Research and Education Agency</u> to strengthen operations of a School-based Technology Dissemination and Youth Skill Development Centre in Eastern Uganda.
- b) Supported the skills enhancement of 42 primary (28 male, 14 female) and 60 secondary school teachers (38 male, 22 female) in post conflict communities in eastern and northern Uganda. The aim was to improve academic performance and promoting retention of the girl child in school.

1.10 Organize the third Young African Innovators competition

- c) The 3rd Young innovators competition was organised as part of 15th RUFORUM Annual General Meeting activities. The Call for nominations attracted 421 applications from 12 countries in West Africa including: Nigeria, Benin, Burkina Faso, Côte d'Ivoire, Gambia, Ghana, Liberia, Mali, Niger, Senegal, Sierra Leone, and Togo. Twenty (20) winners were recognized and awarded prizes: three (3) female and seventeen (17) males from Benin (5), Gambia (1), Ghana (1), Nigeria (11), Senegal (1) and Togo (1).
- d) Earlier cohorts of Young African Innovators competition have continued to shine in other competitive programmes. Mr. Anthony Owei, ePoultry emerged as a winner in the Entrepreneur Africa Prize for Agriculture held in Lagos-Nigeria; Mr. Ante Joseph (Maatah Nasah Ltd) received two grant awards, and an Ambassadorial Award, building onto the RUFORUM Award; and, Ms. Nabuma Shamim, Community Dental and Reproductive Health has been recognised in the Forbes Africa under 30 as the emerging young entrepreneurs and change agents for Africa.
- 2. Flagship programme: RANCH-Regional Anchor Universities for Higher Agricultural Education- This flagship is focused on Strengthening Higher Agricultural Education in Africa (SHAEA), through establishment of regional training nodes to foster agricultural transformation in the continent. It is to be funded through various funding streams including a possible initiative of the World Bank in partnership with African Governments and RUFORUM which is still in a nascent stage of development.
- 2.1 Identify African universities to serve as Centres of excellence for leadership in strategic thematic areas to transform teaching, research and outreach for greater relevance
 - Draft concept notes for establishing regional centres were developed for consideration by different funding agencies. Dialogue is ongoing.
- a) Support Universities to pursue partnerships with industry to spin out start-ups based on commercialisable research outputs and knowledge products.



- b) Supported 90 student enterprises under the RUFORUM Entrepreneurship Challenge Program (RECAP) to secure trademarks, 30 start-ups are independent and operational outside the universities while others adopted the industrial park/incubation model for production and points of sale within the universities. Forty-six (46) jobs have been created in the business enterprises following one full year of incubation within the university campus environment.
- c) The agribusiness incubation hubs have engaged with 72 private sector agencies collaborating to mentor and nurture young students. Together with partners, the RECAP teams have leveraged an additional US\$ 303,000
- d) Five CARP+ students are being supported to commercialize components of pineapple, cassava, baobab, sesame and groundnut value chains among others under the Field Attachment Programme Award (FAPA-Business) as part RUFORUM's commitment to advance the development of the innovation led bio economy.
 - 3. Flagship programme: CREATE-Cultivating Research and Teaching Excellence This flagship is largely supported by DAAD, Carnegie Corporation of New York, and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and the Member Universities under the Graduate Teaching Assistantship (GTA).

3.1 Facilitate Academic Staff Development (ASD) through the Regional Academic Mobility (RAM) and Graduate Teaching Assistantship (GTA) programmes

- a) The Secretariat has continued to facilitate placements of University staff for PhD training in different universities under the Graduate Teaching Assistantships (GTA) Programme. During the year, 46 additional placements were made bringing to total 133 GTA (93 male, 40 female) from 37 Universities successfully placed in 25 universities. Two hundred and eighty-nine (289), (217 male, 72 female) academic Staff from 35 Universities are still awaiting placement. The target is to train 325 PhDs by 2022
- b) To deepen early career engagement to support enrolment and research capacity for African universities and enhance interconnectedness of African Universities, the Carnegie Corporation of New York provided a two-year grant to support research for 40 Graduate Teaching Assistantships, 10 Post-Doctoral fellowships, and 10 Staff exchanges and mobilities within RUFORUM member universities.
- c) To date nine male GTA's from seven sending universities have graduated six(6) of these graduated in the 2019/2020 academic year

GTA graduating students

6		
Sending University	Host University	Programme
University of Zimbabwe	Stellenbosch University	PhD Agronomy
Université Evangélique en Afrique	University of Nairobi	PhD Applied Microbiology (Virology Option)
Makerere University	Stellenbosch University	PhD Horticultural Science
Mzuzu University	LUANAR	PhD Aquaculture & Fisheries Sciences
Moi University	University of Port Harcourt	PhD Environmental Microbiology
University of Cape Coast	University of Port Harcourt	PhD in Chemical Engineering
University of Juba	Gulu University	MSc. Food Security and Community Nutrition
University of Juba	Gulu University	MSc. Agri-enterprises Development
University of Cape Coast	University of Port Harcourt	PhD in Environmental Management & Technology

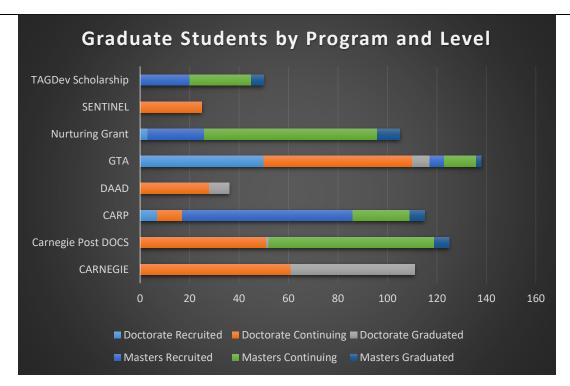


- 3.2 Support establishment of RUFORUM Academic and Research Chairs (RARC) to train the next generation of science leaders for the agricultural sector and enhance the competitiveness of African nations.
- a) This activity similar to the Centres of Excellence under RANCH is still in the nascent stages. Proposal development, fund solicitation from various development partners and negotiations are ongoing.
- 3.3 Develop mechanisms for increasing the participation of women in science, technology and innovation (STI) interventions in RUFORUM member universities.
- Innovation held in Nairobi on 23rd October 2018, developed a *Regional Initiative to strengthen staff capacity and Increase the pool of Women Scientists in African Universities* (RISSCAW), aimed at developing the capacity of universities in Africa to enhance knowledge generation and improvement of livelihoods through high-level graduate training at Masters and PhD level. The initiative was among the five continental initiatives adopted by the Ministerial Round Table during the 15th RUFORUM Annual General Meeting.
- b) Five country studies (Uganda, Sudan, Liberia, Mali and Mozambique) were undertaken to establish the status of participation of women in Science, Technology and Innovation (ST&I) in Africa. The case studies provided a baseline that will be used to measure progress on the interventions to increase the participation of Women in Science, Technology and Innovations.
- c) The Secretariat supported the hosting of the third convening of the Forum for Women Vice Chancellors in Africa (FAWoVC) Symposium during the 15th RUFORUM Annual General Meeting that brought together 45 women leaders from across Africa. There was also participation from Europe and USA. The Women leaders held a half-day mentoring session with 150 upcoming scientist.
- d) New fellowships and research grants initiatives have adopted the 50% opportunity for female applicants. This is the initial step towards capturing the female unique attributes in research and higher education.

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

a) With support from various development partners including Social and Environmental Trade-offs in African Agriculture (SENTINEL Project) of the United Kingdom Research and Innovation (UKRI), Mastercard Foundation (CARP) and the Graduate Teaching Assistant Programme by member universities, RUFORUM continued to support doctoral training on the African Continent. A total of 605 (333 PhD, 272 Masters) are currently enrolled across the various programmes under RUFORUM.





b) Thirteen (13) PhD students (9 Male, 4 female) supported by RUFORUM under the Carnegie Corporation of New York/ Graduate Teaching Assistant and the German Academic Exchange Service (DAAD) completed studies at Jomo Kenyatta University of Agriculture and Technology (1), Lilongwe University of Agriculture and Natural Resources (LUANAR) (1), Makerere University (6), Stellenbosch University (2), and University of Port Harcourt (1).

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

RUFORUM is presently supporting the training of

- a. A Two hundred and three (203) students (113 Male, 90 female) from conflict and post conflict countries of Burundi (1), Cameroon (7), Democratic Republic of Congo (39), Liberia (13), South Sudan (2), Somalia (1), Sudan (109) and Zimbabwe (27) to undertake Masters (128) and PhD studies (63)
- b. The students at network universities in home and other countries

3.6 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

- a) The Secretariat supported 294 students (199 male, 95 female) to attend the 15th Annual General Meeting in Cape Coast Ghana, 2-6 December 2019, and make poster presentations (52 posters), undertake social media training (62) and submit 103 extended abstracts. Students also received training in thesis proposal development and scientific writing (73 Male and 27 female); scientific data management (69 Male and 24 female); accessing scientific publications in AGRIS and AGORA (10 Male and 7 Female); and, social media training (44 male, 18 female).
- b) The Principal Investigators (PI) and the students attached to Community Action Research Programs (CARP+) and RUFORUM Entrepreneurship Challenge Program (RECAP) shared research



- findings and update during the 15th Annual General Meeting. The Principal Investigators received feedback and additional guidance from the RUFORUM Technical Committee.
- c) The Secretariat facilitated the training of eighty (80) students at Gulu University in communication, documentation and networking; and, 43 students (17 females, 26 males) in research proposals development and data analysis training (AMOS and STATA); Financial Management and Financial literacy training which was done in partnership with Kenya Commercial Bank for 58 students (24 females, 34 males) at Egerton; and, Communication and advocacy training with focus on documenting and profiling research projects and personal branding for 64 students (31 males, 33 females) at Egerton University.

3.7 Support the implementation of RUFORUM Post- Doctoral Fellowship Programme

- a) RUFORUM continued to implement the 19 post-doctoral fellowships supported by the Carnegie Corporation of New York. To-date of the 141 students (PhD 42; MSc 73 and BSc 26) under the fellowship, 13 have completed studies (6 Masters and 7 Undergraduates). Fellows and graduate students were supported to present research findings and to obtain feedback and mentorship from professionals during the 15th RUFORUM Annual General meeting. Twenty-one (21) peer reviewed publications focusing on: integrated weed management, agribusiness management, breeding for resistance against major crop pests, agricultural extension, and natural resources management. Some of the technologies, innovations and management practices have been generated including one on botanical fungicide (botanical extracts of neem and lantana) for controlling late blight of tomato in Zimbabwe.
- 4. Flagship programme: K-Hub-Knowledge Hub for University Networking, Partnership and Advocacy- This flagship consolidates and documents the outputs and outcomes from Vision 2030 flagships, mostly supported by contributions from the Member Universities.
- 4.1 Review RUFORUM National Forums guidelines to align to the OP 2018-2022 and at least 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

National Forums were held in Mali (9-14 September 2019) and Zambia (23-25 September 2019). The Mali and Zambia forums included the higher education day that linked higher education institutions to the different actors in the sector. Egerton University organized the 3rd Kenya National forum for Universities, TVETs and other Agricultural industry players under the theme Agricultural Innovations, Research and Transformation for Sustainable Development in the Era of Covid-19.

- 4.2 Widen and enhance online and offline Information Technology (IT) platforms to facilitate and enhance systematic access to information through continuous analysis of user requirements
- a) The Secretariat revamped its Information Management System (RIMS), currently hosted with Amazon Web Services (AWS) to facilitate the K-Hub flagship to create, capture, organize, share and refine information and content across teams and geographic locations thus increasing access to up-to-date evidence-based information and knowledge.
- b) The Secretariat also developed and updated several information platforms to facilitate transfer of university research findings for use by stakeholders and establish a long-term sustainable coordinating mechanism. These included, <u>online impact platform</u>, website for the 15th RUFORUM Annual General Meeting; and, the <u>Young Innovators</u> and <u>Young Scientists</u> websites to enable



- Young people submit their applications for the 15th RUFORUM Annual General Meeting 2019 calls, as well as support for the development of the <u>Forum for Women Vice Chancellors in Africa</u> website
- c) The Secretariat continued to regular publish editions of the RUFORUM <u>Weekly Newsletter</u>, policy briefs, and twenty six (26) storylines through the Blog;
- d) The Secretariat held a training session to enhance the capacity of Public Relations Officers and the Web Team at Kyambogo University on Web 2.0 and Social Media. These trainings will be rolled out to other Member universities.
- e) Online platforms including Social media platforms continue to be a publicity and information dissemination mechanism to reach out to RUFORUM stakeholders and others. Platforms such as Facebook-22,361 followers, Blog-10,845 followers and 654,520 hits, and Twitter-7,215 followers, RUFORUM Website; and MCF@RUFORUM website provide a one-stop centre for updates on scholarship calls, grants and news. The RUFORUM website continues to attract visitors mainly from Unites States of America (57 %), Uganda (12 %), Germany (8 %), Japan (3.4 %), United Kingdom (3.2 %), China (2.6 %), Cayman Islands (1.5 %), Romania (1.06 %), Kenya (0.85 %) and Switzerland (0.64 %)

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

- a) Through RUFORUM weekly, several webinars have been advertised from RUFORUM partners and across cross cutting fields
- together University leaders from Makerere University (Uganda), University of Free State (South Africa), University of Mohammed the 6th Polytechnique (Morocco) and Wageningen University and Research (WUR) to share their Institutional experiences in responding the COVID-19 Pandemics (https://youtu.be/sl2k0algJdo); the second Webinar was hosted 19 June 2020, to be followed by others
- c) In collaboration with Mohammed VI Polytechnic University (UM6P), the Secretariat undertook a survey to identify possible courses for online content development and delivery. Six courses were identified to serve as pilots for development of African tailored Masters courses to be delivered as massive open online courses (MOOCs).

4.4 Provide training on the merits of Open source software to facilitate universities in the use of Open Access software to provide complimentary agricultural extension and advisory services.

a) RUFORUM signed Memorandum of Understanding with the Global Open Data for Agriculture and Nutrition (GODAN) to formalise the partnership for training in Open Access Software. As part of the collaboration between RUFORUM and Global Open Data for Agriculture and Nutrition (GODAN), PhD students under the Sentinel Project were trained and also secured Open Geospatial Software (QGIS, SAGA, GeoNode, Marble, gvSIG Desktop, QGIS Desktop and GRASS GIS) during the 15th RUFORUM AGM in Cape Coast, Ghana to enable them finalize research on time with cutting edge tools.

4.5 Improve the functionality of the RUFORUM Repository through indexing and access by staff, students, and the general public ad libitum

- a) The RUFORUM institutional repository continued to be indexed by <u>Google Scholar</u> to significantly expand the reach of publications emerging from the Network and improve the chances of articles being read, shared, and cited online.
- 4.6 Promote publication of Africa's research outputs in the African Journal of Rural Development and other related publications



- b) Published <u>volume 3 (issue 4)</u> of the African Journal of Rural Development (AFRD) with 10 articles focusing on biotechnology, extension and rural innovation, agronomy, policy and pollution-environmental science.
- c) Published a special issue on Forestry with nine manuscripts under Volume 4, issue 1 of the <u>African</u> Journal for Rural Development.
- d) Published several articles and videos related to the 15th RUFORUM Annual General Meeting including; fifteen thought pieces on various aspects of higher education;
- 4.7 Develop a dynamic database of technologies emerging from RUFORUM supported research grants and other initiatives

The Secretariat is compiling a Compendium of Technologies, Innovations and Management Practices - TIMPs, knowledge and skills) realized from research projects implemented by RUFORUM. This will be published during the 2020/2021 Financial period.

4.8 Examine the knowledge priorities of the network stakeholders and the extent to which the RUFORUM knowledge products and services meet the objectives of the relevant RUFORUM strategies

The Secretariat issued an <u>ICT capacity and knowledge priorities study</u> to establish capacity gaps in the member institutions. Analysis of the <u>survey</u> established that although most universities (70% of the respondents) have an ICT Strategic Plan in place and elearning policy (55% of the respondents), only a few universities (as indicated by 36% of the respondents) provide incentives to staff for the use of e-Learning in teaching.

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

- 5.1 Convene the 15th RUFORUM Annual General Meeting (AGM), meetings of the Board and its committees, the International Advisory Panel (IAP), Technical Committee (TC) and the Committee of Principals and Deans to guide the network to fulfil its corporate mission
- a) During the period the Secretariat convened meetings of the Finance and Administration Committee and the Board Executive Committee that recommended approval of the budget proposal for 2019/20 and external audit report for 2018/19; The 15th RUFORUM Annual General Meeting held 2-6th December, 2019 approved the two reports and Annual Work plan 2019/2020
- b) The 15th AGM agreed that the 2020 (AGM), 2021 (Triennial) and 2022 (AGM) be held in Morocco, Benin and Zimbabwe, respectively; the AGM 2023 to be held either in Uganda or Ethiopia, while Triennial 2024, AGM 2025 and AGM 2026 be held in Namibia, Ethiopia and Zambia, respectively.
- c) The 15th AGM approved the setting up of a Board Sub Committee on Audit, and a Sub-Committee of the Principals and Deans Committee (5 Members representing the different geographical regions of the continent)
- d) The 18th RUFORUM Board Meeting elected Prof. Theresa Akenji from University of Bamenda in Cameroon as the RUFORUM Deputy Board Chair
- e) The RUFORUM International Advisory Panel (IAP) recommended that Member States request the African Union Commission (AUC) to reach out to the World Bank to obtain support for implementation of the SHAEA project.
- f) The 15th AGM recognised four individuals for their outstanding contribution to Africa's development: Three outstanding upcoming Ghana Scientist were also recognized https://ruforum.wordpress.com/2019/11/18/three-3-winners-of-the-ruforum-young-scientists-award-2019-announced/



5.2 Convene at least one meeting of high net-worth individuals to deliberate on support and investment for higher agricultural, science, technology and innovation in Africa

- a) A meeting of RUFORUM partners under the theme *Promoting Equal Opportunity in Youth Employability and Entrepreneurship in Africa* was held 30 September- 1 October 2019 to explore opportunities of synergy and partnerships for youth in agriculture. The meeting generated proposals on areas of synergy, implementation and coordination mechanisms for equal opportunity in youth employability and entrepreneurship in Africa.
- A meeting of Global actors was held on 2nd December 2019 to promote Global Partnerships for Higher Education and Research in Africa. The Secretariat with the support of the Government of Ghana convened a Ministerial meeting as part of activities of the 15th RUFORUM Annual General Meeting in Cape Coast, Ghana to advocate 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 meeting 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 http://www.ruforum.org/AGM2019/sites/default/files/The%20Cape%20Coast%20Ministerial%2 OCommuniqu%C3%A9.pdf

5.3 Support hosting of the 3rd Meeting of the Forum for Women Vice Chancellors in Africa (FAWoVC)

- a) The FAWoVC 3rd symposium involving 46 participants and was held alongside the 15th RUFORUM AGM in Cape Coast, Ghana. The Symposium generated key action points and a roadmap for strengthening and increasing the pool of women scientists in African Universities and other research and development institutions in Africa. The participants attended other symposium sessions including a mentorship interactive session for upcoming scientists, training in project management, scientific data management, proposal development, scientific writing and presentation.
- 5.4 Hold high level dialogues with senior policy leaders in Ghana, Mali, Sierra Leone, Uganda and Zambia High Level Policy Dialogues were part of the Higher Agricultural Education National Days in, Mali, Ghana and Zambia. These convenings brought together academia, private sector, community leaders and policy makers. The convenings provided an appropriate platform to initiate national forums, which is part of the policy development and advocacy medium to promote the link between higher agricultural education and the challenges facing rural communities and capacity of universities to transform the Agricultural Sector. During these convenings the RUFORUM Board of Trustees held face to face meetings with Senior policy makers in these countries.

5.5 Establish strategic partnerships - strategic alliances with other organizations to create a sense of common values and mission

During the year, RUFORUM formalized partnerships with the following organizations;

- i. Education Sub-Saharan Africa (ESSA) to document best practices in scholarship management and open data for management at African universities
- ii. Global Open Data in Agriculture and Nutrition (GODAN) to support training and provision of open source geospatial data analysis software, use of ICTs for learning and research, sensitization on open data and open access publishing.



- iii. Uganda's Ministry of Science, Technology and Innovation to support efforts to enhance use of ST&I to support development processes in Uganda.
- iv. Research and Education Agency to jointly conduct research with rural communities, support attachment of graduate students to rural communities and provide feedback to Ugandan universities on the quality of their training.
- v. BRSSCAL (An organisation jointly established by China Agricultural University and 70 agriculture-related universities with support of the Ministry of Agriculture and Rural Affairs, and the Ministry of Commerce of the P. R. China).
- vi. APLU to benefit from the expertise of universities in the respective continents to develop new technologies and innovations to transform the agricultural sector and higher education especially in Africa.
- vii. FAO to assess Food Security and Nutrition: Institutional and legal frameworks for Eastern African Countries; and, capacity development for young family farmers and graduate students on agricultural innovations for family farmers in Eastern and southern Africa
- viii. Arab Bank for Economic Development in Africa (BADEA) to fund Feasibility studies for implementation of the continental initiative on Strengthening Africa's Science, Technology and Innovation for Entrepreneurship Capacity for Agriculture and Economic Development (SASTIE).

5.6 Recruit a team of managers and programme leadership professionals in line with the approved functional analysis to support delivery of the RUFORUM Vision 2030

a) Advertised for the positions of <u>Technical Specialist</u>, <u>Research and Development</u>, Manager-Programme, Results Measurement & Learning and <u>Technical Specialist</u>, <u>Knowledge Management</u> in line with the approved functional analysis to support delivery of the RUFORUM Vision 2030. Subsequently, Ms. Nada Musa from Sudan was recruited for the position of Technical Specialist-Knowledge Management.

5.7 Undertake Annual internal and external audits

a) The financial year 2018/19 External Audit was finalized and the report presented to the RUFORUM Board Meeting held 5th December 2019 and, to the 15th RUFORUM Annual General Meeting held 6th December 2019 at the University of Cape Coast, Ghana. An unqualified audit opinion was issued by the External Auditor.

5.8 Support University research teams prepare and submit at least 30 proposals to support university-level activities

- RUFORUM partner universities Four proposals out of the seven awarded under the EU supported Intra-Africa Academic Mobility Scheme Call for proposals EACEA/03/2019 the 2019 were supported through the proposal development write shop organised by the RUFORUM Secretariat
- 2. The Secretariat supported Member universities to submit eight (8) University led proposals to Erasmus+ Capacity Building in Higher Education 2020. Results are expected during second half of 2020.
- 3. The Secretariat supported 20 University teams to prepare and submit proposals to the Intra African Academic Mobility 2020 Call. Results are expected in the second half of 2020
- 4. The Secretariat supported member universities in Uganda to respond to the government directive to develop high tech centres proposals to the BRIDGIN Foundation.



- 5. Supported member universities to develop a proposal to the USAID- Bridge Train call.
- 5.9 Prepare and submit at least 10 proposals to support implementation of the RUFORUM Vision 2030 Several research for development and training proposals were developed during the period and submitted to different Foundations and Development Agencies to support education and training at both university and at lower levels of training, and to promote youth entrepreneurship skill development. As part of these efforts, the Carnegie Corporation of New York has awarded US\$1.5 million towards Post-Doctoral and Doctoral training.

5.10 Finalize the second RUFORUM tracer study

The Secretariat continued to undertake the second tracer study to establish the contribution of RUFORUM supported graduates to agricultural transformation in the respective countries of their deployment. Preliminary results from 296 Alumni (190 Male, 106 female) indicate that 96 % of Alumni are employed with 65 % working full time, 63% returning to country of origin, and the majority working in Universities (37 %).