

Briefing Note

Update on the Resource Mobilization for AfriDAP initiative

The 19th Board Executive Committee Meeting, Virtual Meeting via
Zoom (Meeting ID: 824 2878 3047)

23rd June, 2020

Background

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), a network of 126 universities in 38 African countries, has developed African Digital Agriculture Programme (AfriDAP) as an approach to harness the pivotal role of digital technologies in the agricultural value chain transformation which Africa needs to eradicate poverty, steer prosperity, innovation and entrepreneurship. RUFORUM seeks to collaborate with global and African partners who share the passion for Africa's transformation *on creating digital platforms and solutions for research, teaching and learning as well as community engagement* in order to produce skilled human capital, science, technology and innovation needed to transform Agricultural sector on the Continent.

As part of transforming African AHESTI, developing African Digital Agriculture Programme (AfriDAP) is crucial. AfriDAP considers digital technologies as the central point to play a pivotal role in the agricultural value chain transformation which Africa needs to eradicate poverty, steer prosperity, innovation and entrepreneurship. This further strengthens the African opportunities to be competitive at the global stage and within the knowledge economy. There are three key programmatic pillars to

realize AfriDAP (Figure 1): The first one being *digital learning and sharing technologies* to support effective teaching and learning experience ubiquitously within agriculture. The second is data science development which comprises of data science research, big data management for agriculture and capacity building in data science.

The third is incubation and innovations for digital agriculture in order to produce sustainable entrepreneurship and startups to support both the first and second pillars of the AfriDAP in a low-cost manner. The three pillars are supposed to coherently work in harmony to produce a self-sustaining digital agriculture ecosystem that depends on African generated resources and technologies.

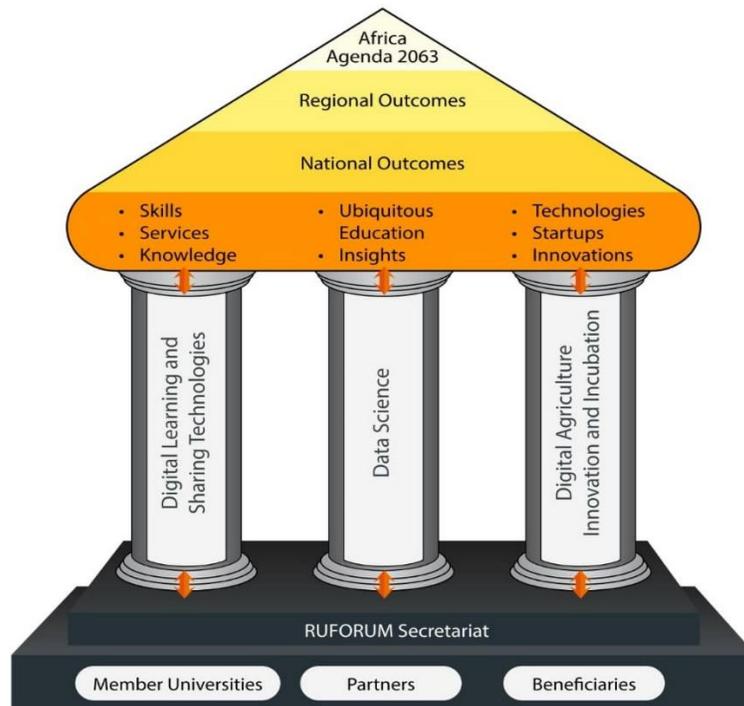


Figure 1: African digital agricultural program (AfriDAP)

RUFORUM as a network of African universities is leading this agricultural digital transformation with support from partners and is currently engaging partners to

strengthen Digital learning through the development of online resources in order to operationalize pillar 1 of AfriDAP (Digital Learning and Sharing Technologies). This is especially urgent in line of the aftermath of COVID- 19 pandemic which calls for strengthening Virtual and Distant Learning to be urgently incorporated in education and training activities of universities and the broader education value chains. Thus there is urgent need to realign online teaching and training, hence the need to tap into those institutions with capacities and resources. In light of this, RUFORUM Secretariat (see www.ruforum.org) and UM6P (see www.um6p.ma) conducted an online survey to establish key Masters programmes for enhancing agricultural sector performance/productivity in the African continent, in line with the Comprehensive African Agriculture Development Programme (CAADP) and advances in IT opportunities. Several programmes were proposed. Further consultations with key stakeholders resulted in identification of eight cross-cutting Masters Programmesⁱ to be refined or developed across African universitiesⁱⁱ as common programmes. These programmes and others need to be refined or developed and contextualized for delivery in the different RUFORUM member universities, with selected courses to be refined/developed and delivered as Massive Open Online Courses (MOOCs).

In 2014, RUFORUM Vice Chancellors agreed to set up a Higher Agricultural Education Capacities Indicator Platform (HAECI), in partnership with IFPRI (International Food Policy Research Institution) ASTI programme. This has been implemented and the Platform was launched on 23rd October 2018 during the RUFORUM Annual General Meeting in Nairobi, Kenya. Currently there are ongoing efforts to strengthen the Higher Agricultural Education Indicator (HAECI) Platform, with possibility of

incorporating aspects of ST&I data. This HAECI platform addresses pillar two of AfriDAP (data science) to try and effectively use ICTs for collecting, processing and providing access to relevant data for decision making on capacities of African higher education institutions.

RUFORUM Secretariat has held discussion with OCP Morocco and its University-University Mohammed the 6th Polytechnique (UM6P) to partner in the two initiatives. There are also ongoing discussion with the Arab Bank for Economic Development in Africa (BADEA) to support establishment of a regional Data Coordinating Hub at RUFORUM Secretariat, which is connected to its Member Universities and other Global Knowledge Partners for data collation and sharing, including for online education resources.

Aim and objectives of the proposed RUFORUM-BADEA Initiative

The proposed initiative is to improve capacities of higher agricultural and ST&I education institutions in Africa. There are three specific objectives:

1. Provide timely, reliable and accurate capacity data on Higher agricultural and ST&I education institutions
2. Establish a framework for insights on the state and trends of higher agricultural and ST&I education institutions in Africa
3. Promote evidence based decision making as an effective approach to higher education in Africa

Way forward

To access BADEA funding RUFORUM Secretariat will need letters of support from the project implementing countries. RUFORUM is reaching out initially to two African Governments, Malawi and Uganda, and subsequently if the proposal is approved, to other Member States.

If BADEA approves the funding the next step of this initiative is to a) bring on board the regional proposed Hubs (Figure 1), b) expand the indicator set (for HAECI), including involving other Member Universities and education agencies as well as rework the data collection mechanism to allow for real-time and accurate information, and c) expand the initiative, in a phased manner (Figure 2) while leaving room to incorporate others during implementation, depending on interest from these other institutions.

RUFORUM as a coordinating data hub, therefore proposes the implementation of this initiative in phases and the proposed phase 1 will include a few regional data hubs and Associated Partners across the globe as shown in Figure 1 below.

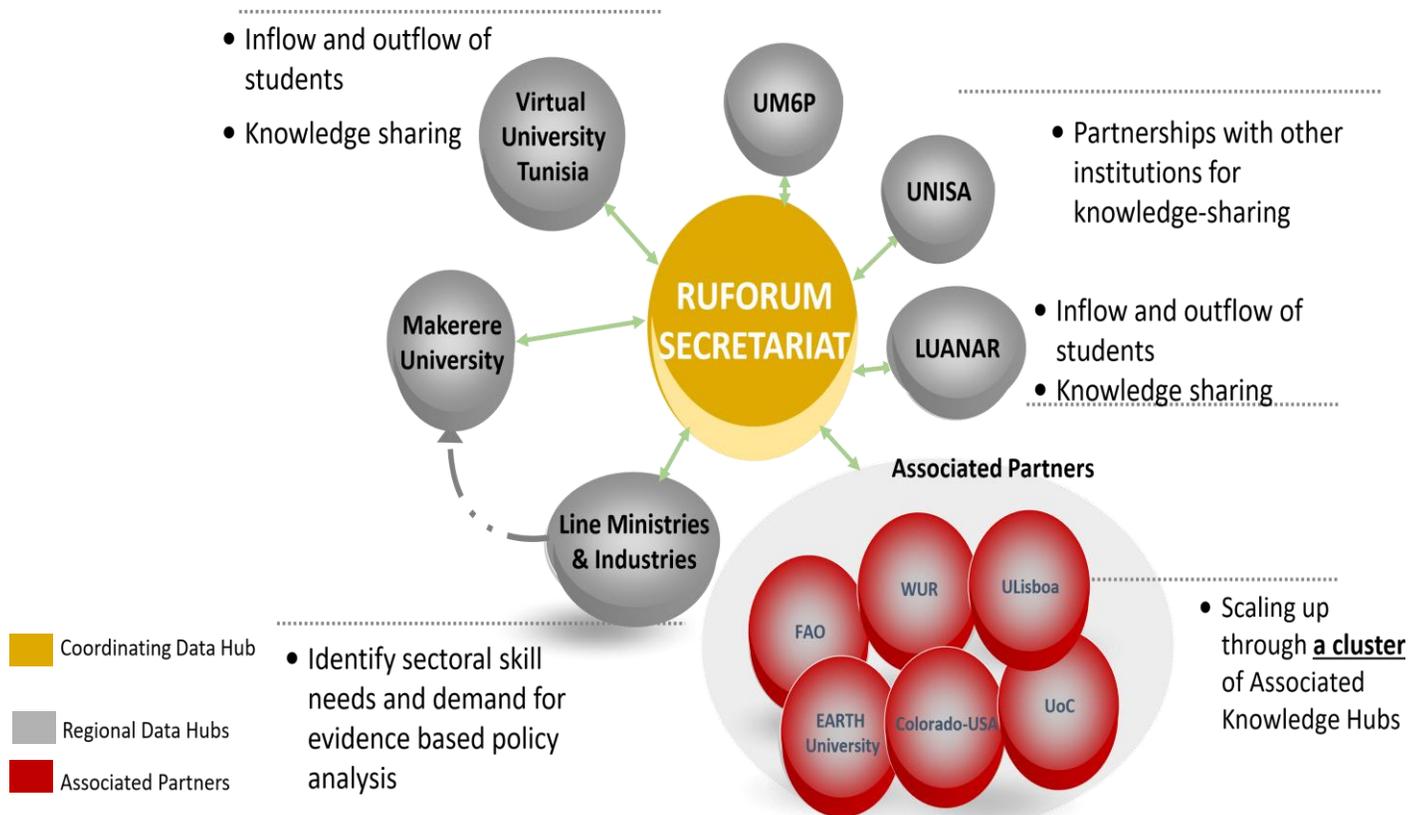


Figure 1: Proposed Phase 1 Regional Learning Platforms and Linkages

The envisioned proposed scaling up is indicated in Figure 2, which may also include other institutions. The overall aim is to set up a Regional Data Hub that will include a) a Higher Education Capacities Indicator Platform, and b) a Regional Repository for data sharing and learning and to facilitate exchange of online resources including teaching and learning modules.

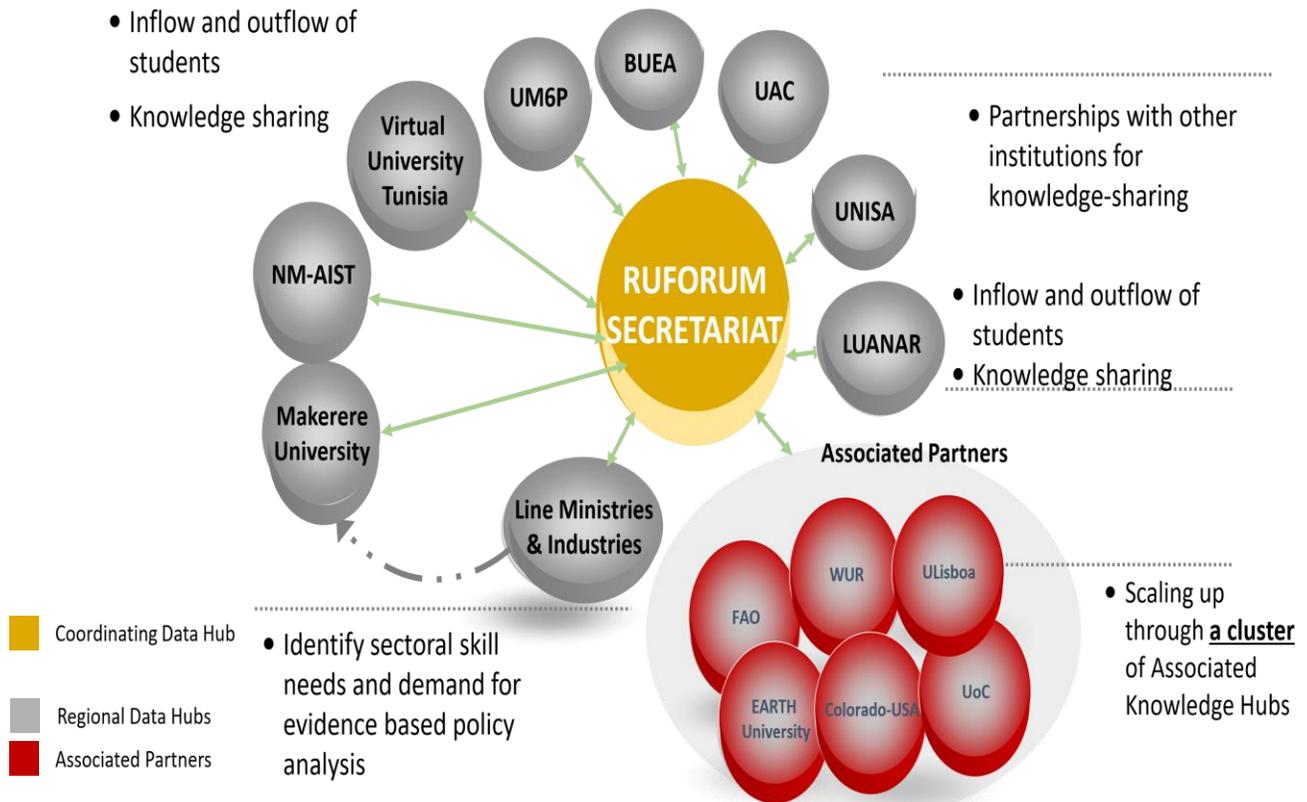


Figure 2: Proposed Phase 2 Regional Learning Platforms and Linkages

Decisions Required from the Board Executive Committee

The BEC is requested to review the above proposed regional initiative and to guide appropriately.

RUFORUM Secretariat

15 June 2020

ⁱ Research Methods, Agricultural Innovations and Entrepreneurship, Fertilizer Science and Technology, Food Systems and Policy Analysis, Agribusiness, Climate Smart Agriculture, Agro Informatics and Monitoring and Evaluation

ⁱⁱ Nelson Mandela African Institute of Science and Technology, University of Buea, University of Abomey Calavi, University of Mohamed the 6th Poly Technique, Makerere University, University of South Africa, Lilongwe



University of Agriculture and Natural Resources, University of South Africa, Jomo Kenyatta University of Agriculture and Technology; Associate Partners: Food and Agriculture Organisation, University of Colorado, EARTH University, Wageningen University and Research Centre, University of Lisbon, University of Catalonia

