# Strengthening Higher Agricultural Education for Agri-Food System Transformation in Africa

### - Project Concept of SHAEA

(draft for consultation)

The version is subject to refinement based on further discussion













## Africa-wide regional agenda to strengthen Agricultural Education, Science, Technology and skills for the youth

- African governments called for <u>coordinated regional initiative</u> to strengthen university capacity especially targeting agricultural faculties
- The meeting of African Ministers of Education, Science and Technology held 21 October 2016 in Cape Town called for a Marshal Plan to:
  - Establish a <u>vibrant academic mobility programmes</u> to increase access to quality academic programmes and foster regional cooperation and integration.
  - Establish <u>lead anchor universities</u> to serve the wider continent in specific skill gap areas especially in Agriculture related fields,
  - Strengthen staff capacities in African Universities and TAE institutions,
  - RUFORUM was tasked to work with partners to develop a programme to strengthen Higher Agricultural Education on the continent

## vision

Provide youth with the skills for Africa's future Food System

### "Regional Anchor University"

- 1. Capacity to provide <u>national</u> and <u>regional</u> leadership for agri-food system transformation
  - demonstrate functional links with government policy-makers, private sector, agriculture extension and show how it will fill the gap between academia and industry
  - demonstrate current and proposed impact on rural communities and agricultural transformation and the role of the university in a knowledge-based economy
- Recognised <u>academic leader</u> able to demonstrate commitment to reform for transformative impact
- 3. Support to internationalize higher agricultural education services
- 4. Potential to evolve into a vibrant and transformative Anchor university

## Consultations suggest a regional project through 'regional anchor universities' to:

Develop competent and relevant human resources (esp. the highly-skilled) required to accelerate agri-food systems transformation in Africa through strengthening (i) agri-food related education and training enhanced with <u>transdisciplinary approaches</u> and applied research at selected African regional anchor universities; (ii) university <u>linkages</u> to the regional agricultural sector – its priorities, needs and stakeholders; and (iii) university <u>partnerships</u> with public and private entities related to agri-food both within and outside the region.

And, address 6 regional Key Gap Areas identified through a multi-year consultative process with government representatives, agricultural university leaders and other stakeholders in Africa:

- 1. Agribusiness and Entrepreneurship
- 2. Agri-food Systems and Nutrition
- 3. Rural Innovations and Agricultural Extension
- 4. Agricultural Risk Management and Climate Change Proofing
- 5. Agricultural Policy Analysis
- 6. Statistical Analysis, Foresight and Data Management

SHAEA focuses on system change rather than on individual institutional benefits. It employs a results-based financing modality to ensure the achievement of results and impact!

#### SHAEA's proposed overall design is outlined as follows:

#### **Project Development Objective:**

To strengthen linkages between selected African universities and regional agricultural sector needs for developing required human resources to accelerate agri-food systems transformation in Africa

#### **Key Beneficiaries**

#### **Individuals:**

- Faculty, students and administrators in selected RAUs and partner institutions
- Agricultural advisory service personnel
- Agricultural policymakers and researchers

#### **Institutions:**

- Agricultural education institutions
- Agricultural research institutes and think-tanks
- Agricultural advisory service organizations
- Agribusiness firms
- Government agencies, development partners and NGOs working in agriculture

#### **Key Results Indicators**

- √ % increase of sector actors acknowledgement of RAUs' leadership and management capabilities for agri-food system transformation
- √ % of agri-food sector actors satisfied with knowledge, competence and skills of RAU graduates
- ✓ No. of academic programs benchmarked or accredited with regional and international standards

(will be adjusted after consultations)

## Component 1: Strengthening Regional Anchor Universities (RAUs) in Regional Key Gap Areas with Specialization(s)

## Subcomponent 1.1: Developing Sustainable Institutional Leadership and Management Capacity for Agri-Food Systems Transformation

Proposed Activity Focus Areas	<ul> <li>Leadership and management capacity development for RAUs</li> <li>Application of a proven institutional change model to each self-identified challenge issue linked to regional key gap areas</li> </ul>
Possible Tools for Using	<ul> <li>Applying the Adaptive Leadership Framework for capacity building in RAUs (cross-RAUs training workshops will be handled by RFU under Subcomponent 2.1)</li> <li>Study visits and mentoring programs with appropriate institutions within and outside the region</li> <li>Immersion and application of institutional change models (e.g., iAGRI change model experiment in Tanzania, Atlantic Fellows for Health Equity in South Africa program, etc)</li> <li>Partnership with appropriate regional and international organizations/associations</li> </ul>

## Component 1: Strengthening Regional Anchor Universities (RAUs) in Regional Key Gap Areas with Specialization(s)

### Subcomponent 1.2: Delivering High Quality and Relevant Research-based Training to Produce a New Generation of Transdisciplinary Problem Solvers for Agri-food Development

#### Proposed Activity Focus Areas

- Curriculum development reviewing/improving content relevance of existing programs, developing transdisciplinary courses/ programs, including online offerings, to address skill shortage in the identified regional key gap areas
- Program benchmarking/accreditation more academic programs meeting international standards, esp. those critical
  to addressing regional key gap areas
- Upgrading faculty's professional qualifications, including modern pedagogies and transdisciplinary approaches
- Entrepreneurship training –skills for agri-food job-market, institutionalizing such training
- Increased access with cross-regional mobility cultivating a new generation of critical mass of agri-food scientists/technicians with an inclusive admission policy for degree students and short-term trainees (see Component 2 for targeting, on specific topic areas that are pre-defined by RSC, based on regional/national demand and priorities)

#### Possible Tools for Using

- Curriculum Review Committees with the participation of agricultural advisory services, the private sector and international experts
- Partnerships with other academic/research institutions, advisory services and the private sector within and outside the region
- o Joint or twinning programs with other academic institutions within and outside the region
- A visiting scholar program for faculty exchange among RAUs (see Component 2 for its linkage and facilitation)
- o Internship/apprenticeship programs with agribusiness firms, advisory services, and agri-food related organizations
- o A differentiated fee scheme to incentivize admission of more regional, female and rural students (e.g., through PLIs)

## Component 1: Strengthening Regional Anchor Universities (RAUs) in Regional Key Gap Areas with Specialization(s)

#### Subcomponent 1.3: Fostering University's Field-based Research and Outreach to Agriculture Sector Stakeholders

Proposed
Activity
<b>Focus Areas</b>

- Strengthening research collaborations (while developing an experiential learning program for students) with agrifood relevant public and private entities such as research institutes, think-tanks, agribusiness firms, advisory services, farmers and public agencies
- Upgrading knowledge and skills of agricultural advisory service personnel with latest research findings and technologies relevant to their services
- Contributing to or leading national and regional agricultural policy dialogue and debate
- Disseminating agri-food related general knowledge/info to agricultural sector stakeholders

#### Possible Tools for Using

- Competitive Grants to support Community Action Research Projects (CARPs) with engaging agricultural TVET institutions on specific topics defined by agri-food development priorities either regional or national (based on the CARP+ model in Kenya)
- Contractual or twining arrangements with agricultural advisory service organizations and private sector to provide targeted training with short-term courses for extension service personnel
- o Establishment of an <u>agri-food policy center</u> on strategic planning and policy analysis for the agricultural sector
- Leading the formulation of a 10-year strategic plan to transform a Regional Key Gap Area (chosen based on a RAU's specialization) with key stakeholders both regional and national, contributing to CAADP\*
- o Creating an effective media platform (e.g., online, TV or radio) for agri-food knowledge dissemination

## Component 2: Developing a Network of Agricultural Tertiary Education Institutions to Support Regional Agri-Food Transformation Needs

#### **Subcomponent 2.1: Capacity-building Support to RAUs through Regional Interventions**

Proposed Activity Focus Areas	<ul> <li>Addressing common inadequacies of institutional capacity facing RAUs – e.g. leadership, entrepreneurship, PS partnership development, outreach to AAS and farmers, M&amp;E, grant management/revenue mobilization</li> <li>Mobility– faculty/students exchange among RAUs and sharing good practices</li> <li>Partnership activity facilitation - between RAUs and relevant regional agri-food organizations and networks in quality assurance, research, agribusiness, and agricultural policy (see Component 3).</li> </ul>
Possible Tools for Using	<ul> <li>Workshops, conferences, e.g. on capacity-building needs/topics identified by RAUs</li> <li>Annual Vice-Chancellors/Deans Round Table between RAUs and global leading agricultural universities</li> </ul>

## <u>Subcomponent 2.2: Capacity-building Support of RAUs to Associated Agricultural Tertiary Education Institutions</u> and the Agriculture Sector

Proposed Activity Focus Areas	<ul> <li>Leadership and management offerings by RAUs to AATEI</li> <li>Faculty development – upgrading faculty's professional qualifications e.g. modern pedagogies and research skills, of AATEIs</li> <li>Improving and upgrading academic programs and standards of AATEIs</li> </ul>
	<ul> <li>Training modules (including online ones), internships, mentoring programs through twining arrangement between a RAU and its AATEIs</li> <li>Visiting scholar programs; A shared online platform for providing high quality online courses</li> </ul>

#### SHAEA Results Chain Framework

#### Long-term Indicators **Activities** Intermediate Outcomes Impact outcome · % RAU staff at management level trained in institutional Conduct Leadership and management capacity development for RAUs leadership and change management · Pilot proven institutional change model to each self-identified · At least 5 change processes (each addressing a particular self-RAU institutional challenge issue linked to regional key gap areas identified challenge) using the proven institutional change leadership and model(s) concluded with measurable results. management capability for Agri-food system transformation Undertake curriculum development to address skill shortage in the •# of functional partnerships with internationally recognized strengthened identified regional key gap areas education institutions # of transdisciplinary courses, programs Institutionalize student placement in form internship/apprenticeship launched in regional key gap areas as part of training o# of transdisciplinary courses, programs benchmarked and RAU producing high quality launched in regional key gap areas Support Program benchmarking/accreditation and relevant training Resource with · Support Faculty development through the regional visiting scholar #. of faculty who participated in the regional exchange/visiting generating transdisciplinary scholar program transdisciplinary problem skills relevant Institutionalize community outreach in the key gap areas •#. of students enrolled in agri-food related disciplinary areas solvers in key gap areas •# of students taking internship or apprenticeship placement Undertake cross-regional mobility to increase access to researchtransformation based training · A tracer study mechanism established for evaluating program of Africa's Agrirelevance and monitoring graduate employment and feedback food systems Support strengthening research collaborations with Agri-food relevant Agri-food •# of CARP+s completed with results system •# of short courses developed to enrich curricula of TVET Upgrade knowledge and skills of agricultural advisory service Linkages between RAU institutions in key gap areas personnel with latest research findings and technologies relevant to performance and Regional # of agricultural advisory service personnel trained improvement agricultural sector · A 10-year strategic plan for transforming a regional key gap area Contribute to or lead national and regional agricultural policy dialogue needs in key gap areas for completed and endorsed by relevant national and regional bodies and debate strengthened sustainable #. of stakeholders benefited from RAU's knowledge/info Disseminate agri-food related general knowledge/info to agricultural dissemination development sector stakeholders Strengthened •# of students who an internship/apprenticeship with agribusiness Institutionalize student placement form national and in Africa firms, advisory services, and agri-food related organizations internship/apprenticeship as part of training regional collaboration •# of regional capacity-building events organized between Address common inadequacies of institutional capacity facing RAUs universities and •# of partnerships brokered to facilitate the RAUs to link with the Promote mobility and cross-fertilization of faculty and students actors within private sector, agric advisory service providers and think tanks among RAUs Africa's Agrio#of dissemination events conducted linking with the agri-food Facilitate partnership activities to strengthen collaboration with food sector sector sector actors Institutional capacity of Conduct dissemination events linking with the agri-food sector Agricultural Tertiary Education Institutions and •# of functional twining programs established between RAUs and related actors strengthened AATEIS Undertake leadership and management development of Associated to better address •# of leaders/managers from AATEIs trained Agricultural Tertiary Education Institutions (AATEIs) in the region constraints along the agri-•# of AATEI faculty participated in and completed the Visiting Undertake faculty development – upgrading faculty's professional food system Scholar Programs offer by RAUs qualifications, including modern pedagogies and research skills, of # of learners registered and completed online courses offered by RAUS Improve and upgrade academic programs and standards of AATEIs

•# of graduates on placement in sector

#### Component 3: Project Facilitation, Coordination and Management

This component will be implemented by the RFU in collaboration with SHAEA implementation entities in each participating country.

- Implementation oversight with RSC and NSC, effective communications
- Results assurance results framework implementation and disbursementlinked indicators (DLIs) verification
- M&E, fiduciary and safeguards support RAUs and facilitate their reporting in these areas
- Knowledge-sharing among RAUs on SHAEA implementation

### A result based approach- Disbursement based indicators (DLIs)

Disbursement linked indicator	Action to be completed	Maximum disbursement amounts available (TBD)
DLI #2 Strengthened University Leadership and Management	DLI#2.4 Leadership role in knowledge generation for Agri-food systems transformation	DLI#2.4 (year 5)
DLI #3 Strengthened education capacity in key gap areas	DLI#3.5 International accreditation of transdisciplinary post graduate programs within the key agri-food knowledge gap areas	DLI#3.5 (year 2, 3, 4)
DLI#4 Strengthening linkages between RAU and Regional agricultural sector needs in key gap areas	DLI#4.1 Strategic national or Regional Partnerships sector actor	X
	DLI#4.4 10-year strategic plan to transform key gap area of knowledge	X

#### The project will use results-based financing to achieve these results:

- The results-based financing modality with disbursement-linked indicators (DLIs) to finance the agreed activities
- Funds disbursed against the independently-verified achievement of the agreed results.

#### Financing modality summary of the proposed activities under SHAEA:

Financing Modality	Component 1		Component 2		Component 3	Implementing Agency	
	Subcomponent 1.1	Subcomponent 1.2	Subcomponent 1.3	Subcomponent 2.1	Subcomponent 2.1	-	-
<b>DLI-based</b>	٧	٧	٧	-	٧	-	RAUs
SoE-based*	_	-	-	٧	-	٧	RUFORUM

<sup>\*</sup> Traditional financing modality and its disbursement is based on statement of expenses.

- Proportion of project funding accessible to the agriculture sector for "purchasing" services from the RAUs to meet sector demands.
- "purchasing" list presented by the Ministry of Agriculture annually, approved by the NSC, and incorporated into the RAU annual work program.
- Funding for such "purchasing" disbursed when the agreed services are delivered and the results independently verified.

## For effective and efficient implementation, SHAEA proposes the following governance structure:

Regional	Regional Steering Committee (RSC) (representatives from regional bodies, governments of the participating countries, agriculture experts, private sector)  (will invite the government representatives from the existing RSCs of ACE/WAAPP/ECAAT projects for better integration and synergy)	~ 17-19 members
National	Project Steering (/Advisory) Committee ( <i>NSC</i> ) (representatives from MoA, MoE, MoF/MoNP, Vice Chancellor(s) of the selected RAU, relevant higher education and agriculture agencies)  (will use the existing NSCs of ACE/WAAPP/ECAAT projects, which could be expanded with required subject-matter experts as necessary, for better integration and synergy)	~ 7-9 members
Institutional	SHAEA Implementation Committee/Unit  (in case where the selected RAU also hosts ACE(s), the same governance structure / implementation arrangement the University set up for its ACE(s) implementation will be use for SHAEA and could be expanded with required subject-matter experts as necessary)	as appropriate

Implementation arrangement detail will be discussed with each government for meeting the country's specific needs.

### **SHAEA** preparation has a tight timetable:

No.	Milestone	Responsible Party	Anticipated Timeframe
1	First RSC and RFU meeting	RSC/RFU/WB (organized by RFU)	July 2018
2	In-country stakeholder consultations	Gov/RFU/WB (organized by the gov, facilitated by RFU)	July-August 2018
3	Issuing the Call for Proposals for RAUs	RSC/RFU	July 31, 2018
4	RAU proposal submission	Gov submits to RFU (by deadline)	November 30, 2018
5	RAU proposal evaluation and selection	IEC conducts evaluations and submit recommendations to RSC who makes the selection	By mid-January, 2019
6	SHAEA appraisal	WB	By Feb 2018
7	SHAEA negotiations	MoFs/WB	March-April 2019
8	SHAEA submission to the WBG Board	WB	End May 2019
9	SHAEA approval by the WBG Board	WB	End June 2019

SHAEA preparation WB team is comprised of a small regional core team with country teams resided in WB country offices of the participating countries which are led jointly by the country TTLs for agriculture and education.

# Thank You!

#### Comments and suggestions are welcome! Please send them to:

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### Discussion and Consultations with Stakeholders

- 1. What major agricultural development challenges does your country face in the area of required human resources?
- 2. Does SHAEA's design help to address some of them?
- 3. Which part of the project design should be customized further in order to better address those challenges?
- 4. Given the challenges and relative competitive strength of your universities in agri-food related subject areas, which regional gap area(s) identified by SHAEA should be the focus of your country's participation?