

Strengthening Higher Agricultural Education for Agri-Food Systems Transformation in Africa

- Project Concept of SHAEA

(draft for consultation)





- **Africa needs to stimulate transformational entrepreneurship**
 - 10 to 12 million young newcomers to the labour market each year (Only 3 million jobs)
 - Countries in Africa still typically lack the regulatory good practices needed to effectively stimulate business, particularly in the vital agribusiness sector



- **Africa needs to enrol more students, but has limited funding to invest**
 - Less than 10% of young people in Africa are enrolled (global average = 26%)
 - Funding is inadequate to grow to competitive levels



- **Africa has a higher education staffing crisis**
 - Shortage of academic staff, particularly with advanced degrees; but some universities understaffed by 40%
 - Low proportion of staff under 40



- **Pressing and urgent need for curriculum reform and skills development**
 - To combat growing graduate unemployment and meet industry needs
 - Need to align training with promising career paths (e.g. agriculture and biotechnology)
 - Universities traditionally prepared students for public sector

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

- African governments called for coordinated regional initiative 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 lead anchor universities to serve the wider continent in specific skill gap areas especially in Agriculture related fields,
 - Strengthen staff capacities in African Universities and TAE institutions,
 - Establish a vibrant academic mobility programme to increase access to quality academic programmes and foster regional cooperation and integration.
- 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**

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 transdisciplinary approaches and applied research at selected African regional anchor universities; (ii) university linkages to the regional agricultural sector – its priorities, needs and stakeholders; and (iii) university partnerships 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!*

“Regional Anchor University”

1. Capacity to provide national and regional leadership for agri-food systems 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
2. Recognised academic leader 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

See pre-call for proposals: <http://www.ruforum.org/SHAEA/>

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)

All will be modified after consultations as necessary

Component 1: Strengthening Regional Anchor Universities (RAUs) in Regional Key Gap Areas

Sub-component 1.1: Developing Sustainable Institutional Leadership and Management Capacity

| | |
|-------------------------------|--|
| Proposed Activity Focus Areas | <ul style="list-style-type: none">■ Leadership and management capacity development for RAUs■ Application of a proven institutional change model to each self-identified challenge issue linked to regional key gap areas |
| Possible Tools for Using | <ul style="list-style-type: none">○ Applying the Adaptive Leadership Framework for capacity building in RAUs (cross-RAUs training workshops will be handled by RFU under Sub-component 2.1)○ Study visits and mentoring programs with appropriate institutions within and outside the region○ Immersion and application of institutional change models (<i>e.g., iAGRI change model experiment in Tanzania, Atlantic Fellows for Health Equity in South Africa program, etc.</i>)○ Partnership with appropriate regional and international organizations/associations |

Component 1: Strengthening Regional Anchor Universities (RAUs) in Regional Key Gap Areas

Subcomponent 1.2: Delivering Research-based Training to Produce a New Generation of Transdisciplinary Problem Solvers

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*)
- Implement student internships and apprenticeship placements within the sector

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
- 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*)
- Internship/apprenticeship programs with agribusiness firms, advisory services, and agri-food related organizations
- A differentiated fee scheme to incentivize admission of more regional, female and rural students (*e.g., through DLIs*)
- Undertake tracer studies for evaluation the program relevance to sector e.g. monitoring graduates employability

Component 1: Strengthening Regional Anchor Universities (RAUs) in Regional Key Gap Areas

Sub-component 1.3: Fostering University's Practical and Field-based Research and Outreach to Agriculture Sector Stakeholders

Proposed
Activity
Focus Areas

- Strengthening research collaborations (*while developing an experiential learning program for students*) with agri-food 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 twinning arrangements with agricultural advisory service organizations and private sector to provide targeted training with short-term courses for extension service personnel
- Establishment/strengthening of an agri-food policy center 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*
- Creating an effective media platform (*e.g., online, TV or radio*) for agri-food knowledge dissemination

Component 2: Scaling-up Impact

Sub-component 2.1: Strengthening Knowledge Exchange and Faculty/Student Mobility Platforms among RAUs

| | |
|-------------------------------|---|
| Proposed Activity Focus Areas | <ul style="list-style-type: none">▪ Addressing common inadequacies of institutional capacity facing RAUs – e.g. leadership, entrepreneurship, PS partnership development, outreach to AAS and farmers, M&E, grant management/revenue mobilization▪ Mobility– faculty/students exchange among RAUs and sharing good practices▪ Partnership activity facilitation - between RAUs and relevant regional agri-food organizations and networks in quality assurance, research, agribusiness, and agricultural policy (<i>see Component 3</i>). |
| Possible Tools for Using | <ul style="list-style-type: none">○ Workshops, conferences, e.g. on capacity-building needs/topics identified by RAUs○ Annual Vice-Chancellors/Deans Round Table between RAUs and global leading agricultural universities |

Component 2: Scaling-up Impact

Sub-component 2.2: Supporting Clusters of Associated Agricultural Tertiary Education Institutions through Partnership with RAUs

Proposed
Activity
Focus Areas

- Leadership and management offerings by RAUs to Associated Agricultural Tertiary Education Institutions (AATEIs)
- Faculty development – upgrading faculty’s professional qualifications e.g. modern pedagogies and research skills, of AATEIs
- Improving and upgrading academic programs and standards of AATEIs

Possible
Tools for
Using

- Training modules (*including online ones*), internships, mentoring programs through twinning arrangement between a RAU and its AATEIs
- Visiting scholar programs; A shared online platform for providing high quality online courses

Component 2: Scaling-up Impact

Sub-component 2.3: Supporting capacity of the Agriculture Sector to formulate demand for skills and policy research

Proposed
Activity
Focus Areas

- Strengthening capacity of the Ministry of Agriculture to formulate demand for Agri-Food Sector skills and policy research
- Providing Technical Assistance to Ministry of Agriculture for leading strategic assessments
- Encouraging and retaining graduates to be connected to and work in the Agricultural sector

Possible
Tools for
Using

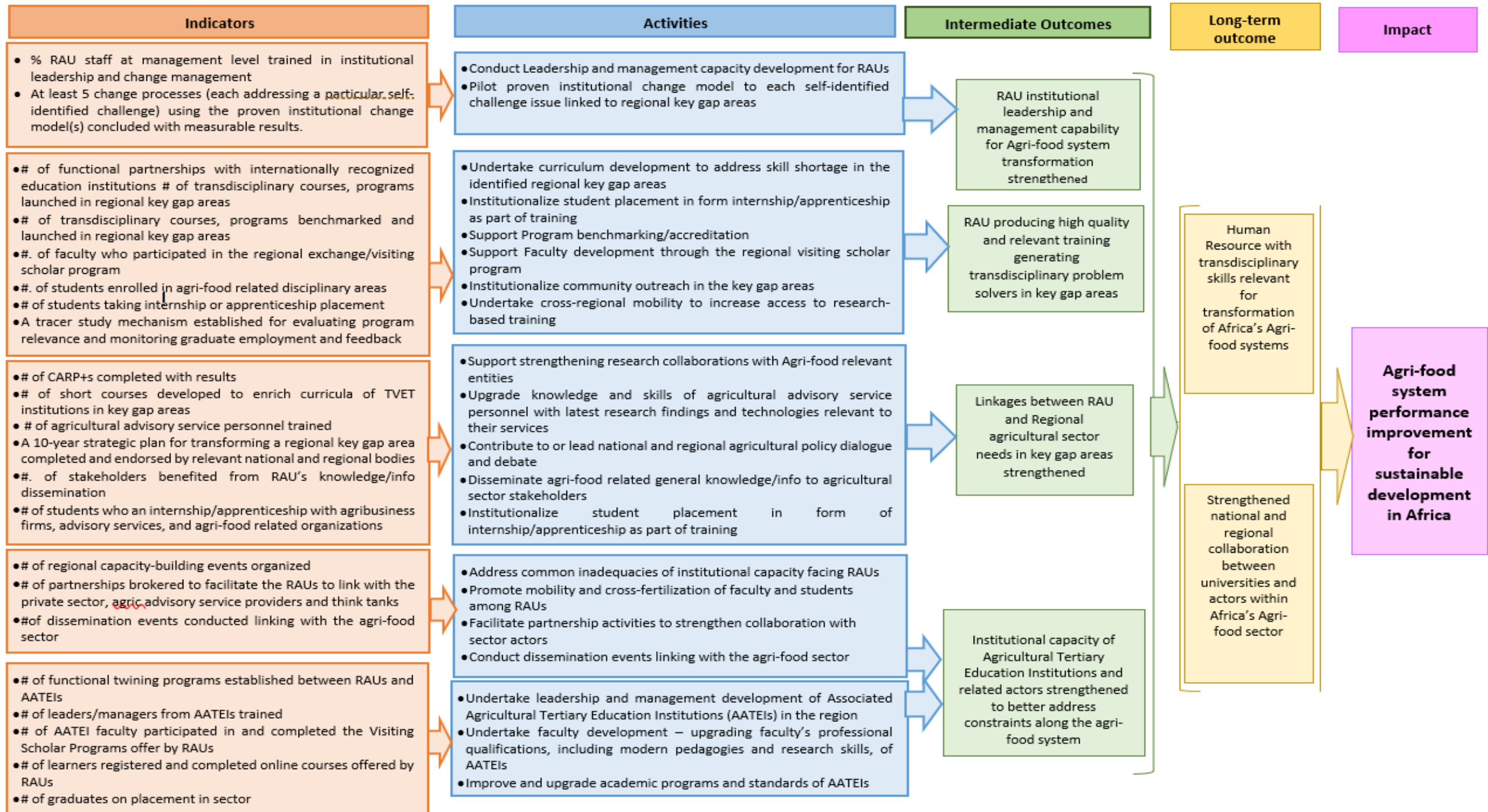
- Assisting assessments on issues related to KGAs for sector strategy development
- Capacity building of policy unit and Training for staff of Ministry of Agriculture on issues related to KGAs
- Sector Attachment Schemes (SAS) to facilitate graduate employment in the agricultural sector

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 disbursement-linked indicators (DLIs) verification
- M&E, fiduciary and safeguards – support RAUs and facilitate their reporting in these areas
- Knowledge-sharing – among RAUs on SHAEA implementation

SHAEA Results Chain Framework



A result based approach- Disbursement Linked indicators (DLIs)

| Disbursement linked indicator | Action to be completed | Maximum disbursement amounts available |
|--|--|--|
| DLI #3 Strengthened education capacity in key gap areas | DLI# 3.1 Strategic international partnerships | TBD |
| | DLI#3.3 Newly enrolled post graduate students in the transdisciplinary post graduate programs within the key agri-food knowledge gap areas of which at least 30 % must be regional (none national African) and at least 30 % women. | TBD |
| DLI#4 Strengthening linkages between RAU and Regional agricultural sector needs in key gap areas | DLI#4.2 Number of CARP++s operational | TBD |
| | DLI#4.4 10-year strategic plan to transform key gap area of knowledge | TBD |

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 2.2 | Subcomponent 2.3 | - | - |
| DLI-based | √ | √ | √ | - | √ | - | - | RAUs |
| SoE-based* | - | - | - | √ | - | - | √ | RUFORUM |
| | - | - | - | - | - | √ | - | MoA |

* 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

| | | |
|-----------------------------|---|------------------------|
| <p>Regional</p> | <p>Regional Steering Committee (RSC) (representatives from regional bodies, governments of the participating countries, agriculture experts, private sector)</p> <p><i>(will invite the government representatives from the existing RSCs of ACE/WAAPP/ECAAT projects for better integration and synergy)</i></p> | <p>~ 17-19 members</p> |
| <p>National</p> | <p>Project Steering (/Advisory) Committee (NSC) (representatives from MoA, MoE, MoF/MoNP, Vice Chancellor(s) of the selected RAU, relevant higher education and agriculture agencies)</p> <p><i>(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)</i></p> | <p>~ 7-9 members</p> |
| <p>Institutional</p> | <p>SHAEA Implementation Committee/Unit</p> <p><i>(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)</i></p> | <p>as appropriate</p> |

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 | <i>First RSC and RFU meeting</i> | <i>RSC/RFU/WB (organized by RFU)</i> | <i>July 2018</i> |
| 2 | <i>In-country stakeholder consultations</i> | <i>Govt/RFU/WB (organized by the govt, facilitated by RFU)</i> | <i>July-August 2018</i> |
| 3 | <i>Issuing the pre-call for proposals for RAUs</i> | <i>WB/RFU</i> | <i>July 31, 2018</i> |
| 3 | Issuing the Call for Proposals for RAUs | RSC/RFU | August 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

- What major challenges in skills and human resources does Kenya face in implementing regional and national strategies for agricultural development?
- Does SHAEA's design help to address some of them?
- Which part of the project design should be customized further in order to better address those challenges for Kenya?
- Given the challenges and relative competitive strength of Kenya and its universities in agri-food related subject areas, which regional gap area(s) identified by SHAEA should be the focus of Kenya's participation?

Discussion and Consultations with Stakeholders

- How can the involved actors in agri-food in Kenya work together to effectively harness the opportunity presented by SHAEA?
 - What is the role of the national government in SHAEA?
 - Apart from universities, which other actors should be mobilized to participate in and contribute to SHAEA's implementation in Kenya?
 - How to engage and involve the private sector in agri-food in Kenya in SHAEA's implementation?
 - What are the specific areas Kenya would like to benefit from the regional capacity-building program?