In particular, the Economic Community for West African States (ECOWAS), the Common Market for Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC) will be used to identify key priorities for the RAUs to pursue their regional agenda and to support the development of regional products that will contribute to the transformation of the regional agri-food sector. The priorities will ensure alignment of the RAUs to meeting regional objectives of CAADP, the Malabo Declaration and the Science, Technology and Innovation Strategy for Africa (STISA) 2024. The RAUs will also link to the research agenda of the sub-regional organizations such as West and Central African Council for Agricultural Research and Development (CORAF/WECARD), Association for strengthening Agricultural Research in Eastern and Central Africa (ASARECA), Center for Coordination of Agricultural Research and Development for Southern Africa (ESARD/ECAZ), WECARD), Association for strengthening Agricultural Research and Development in Africa (FARA) and the regional research systems networks and technology tailored for smallholder farmers. Experts developing disruptive technology catalytic to primarily rural crop and livestock value chains.

How are the Regional Anchor Universities Selected?

The SHAEA RAUs are selected through a process of rigorous independent evaluation facilitated by RUFORUM. An objective, well balanced, academically- and private sector recognized composition of the Independent Evaluation Committee (IEC) is of the utmost importance to quality, potentials, and impact of the RAU’s selected and funded under SHAEA. Therefore, the members of the IEC are independent of the proposal-submitting institutions and will be formed by each participating government and be funded under SHAEA. Therefore, the members of the IEC are independent of the proposal-submitting institutions and will be formed by each participating government and be facilitated by the lead ministry designated by the government for SHAEA, to provide guidance and oversight to SHAEA implementation in its respective country. In implementation of the project, SHAEA will work closely with Regional Economic Community (RECs) in each of the participating sub-regions of Africa.

A Win – Win Situation

The SHAEA Project will benefit Individuals (Faculty, students and administrators in selected RAUs and partner institutions, Agricultural advisory service personnel, Agricultural policymakers and researchers, and Farmers and other producers. Institutions (Agricultural education institutions, Agriculture research institutes and think-tanks, Agricultural advisory service organizations, Agribusiness firms, Government agencies, development partners and NGOs working in agriculture."

SHAEA Project Actors and Linkages

<table>
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<th>Role</th>
<th>Actors</th>
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<td>Government agencies, development partners and NGOs</td>
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SHAEA is addressing the following six regional key gap areas:

- Agribusiness and Entrepreneurship, training experts in engineering for food processing, to design and build the food processing plants, food packaging, supply chain logistics to create supply chains that can be sustainable while moving food long distances to market. The technical skills needed to be complemented with soft skills with integrative thinking to solve real production, processing, distribution or other problems. Enhancing the entrepreneurship spirit and mindset of graduates to create employment opportunities.
- Agri-food Systems and Nutrition, training food science, technology, nutrition, and public health professionals who can contribute to product development for tasty, nutrition, and public health professionals who can contribute to product development for tasty, inexpensive nutrient dense products by building on local palates.
- Rural Innovations and Agricultural Extension, training professionals focused on increasing the productivity gains by supporting provision of agricultural advisory services to smallholder farmers and leveraging extension services to smallholder farmers and leveraging extension networks and technology tailored for smallholder farmers. Experts developing disruptive technology catalytic to primarily rural crop and livestock value chains.
- Agricultural Risk Management and Climate Change, training professionals across disciplines adept at assessing climate change risk and designing climate smart technologies and farming practices.
- Agricultural Policy Analysis, training experts who can understand and forecast consumption patterns, training food science, technology, nutrition, and public health professionals who can contribute to product development for tasty, inexpensive nutrient dense products by building on local palates.
- Statistical Analysis, Foresight and Data Management, training experts in spatial analysis and econometrics who can understand and forecast consumption patterns, training food science, technology, nutrition, and public health professionals who can contribute to product development for tasty, inexpensive nutrient dense products by building on local palates.
- Proofing, training professionals focused on increasing the productivity gains by supporting provision of agricultural advisory services to smallholder farmers and leveraging extension services to smallholder farmers and leveraging extension networks and technology tailored for smallholder farmers. Experts developing disruptive technology catalytic to primarily rural crop and livestock value chains.
- Agri-food Systems and Nutrition, training experts in engineering for food processing, to design and build the food processing plants, food packaging, supply chain logistics to create supply chains that can be sustainable while moving food long distances to market. The technical skills needed to be complemented with soft skills with integrative thinking to solve real production, processing, distribution or other problems. Enhancing the entrepreneurship spirit and mindset of graduates to create employment opportunities.

Implementation

The implementation arrangement for SHAEA follows a tiered structure with clear roles and responsibilities for each of the directly involved parties. The selected RAUs will be the main implementing agencies of SHAEA, with support from the project’s Regional Steering Committee (RSC) and RUFORUM as well as their respective governments and partners from both the public, private sectors and Regional Economic Communities (RECs). The Regional Steering Committee (RSC) provides overall guidance and oversight for the project. It is the decision-making body of the project and comprises two representatives from each participating government and is formed by the lead ministry designated by the government for SHAEA, to provide guidance and oversight to SHAEA implementation in its respective country. In implementation of the project, SHAEA will work closely with Regional Economic Community (RECs) in each of the participating sub-regions of Africa.

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SHAEA Priority Areas

- Agribusiness and Entrepreneurship
- Agri-food Systems and Nutrition
- Rural Innovations and Agricultural Extension
- Agricultural Risk Management and Climate Change
- Agricultural Policy Analysis
- Statistical Analysis, Foresight and Data Management
- Proofing

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Challenges facing Agri-Food Systems in Africa

Agriculture accounts for one-third of GDP and over 65 percent of employment throughout Africa. By 2025, more than half of the job growth in Ethiopia, Uganda, Tanzania, Mozambique, Malawi, and Zambia will still be in the agri-food sector (Figures 1,2). Production is increasing but not as fast as population growth, and productivity is stagnating. Over three-quarters of the poor live in rural areas, so improving farmers’ incomes will significantly reduce poverty and increase equity. Agricultural growth provides opportunities for rural entrepreneurs to establish small businesses that grow value chains and take advantage of modern communications to link town and country markets. Evidence from the agricultural transformation in Asia suggests that a 1% acceleration in agrarian growth can generate up to 1.5% in non-agrarian growth. The agricultural sector is vital for creating robust, equitable, and diversified economic growth.

The situation in the livestock sector in Sub-Saharan Africa is similar. Overall food import bills on the continent are rising, reflecting a growing demand for higher-value processed foods that are not being met domestically. The analytic policy and business environment are not adequately responding to the mega-trends that are reshaping the food system and the broader economies on the continent. The skills needed to catalyze agricultural transformation in today’s context are in short supply. They span a different set of skills across the agriculture and the broader food system value chains and include (besides the traditional agricultural sectors) food processing, manufacturing, and distribution.

Opportunities

- The opportunities for Sub-Saharan Africa’s food system to generate jobs, create sustainable economic growth, and promote food security are immense.
- Yet, Africa’s food system is failing to keep pace with food demand.
- Structural shifts in the food system mean different skill needs for the increasingly youthful workforce.
- A differentiation set of skills is needed in support of an African food system.
- The recent increase in investment in agricultural innovation holds the promise of making agricultural education and employment attractive for youth.
- Africa’s higher education institutions fail short of meeting the needs of the modern food system.
- Given the myriad of challenges, a paradigm shift needs to occur among Africa’s academic leaders to set agricultural education on a different path.
- Agriculture training institutes such as universities and agricultural colleges can effectively contribute to meeting the need for high-skilled workers in the food and agriculture sector.

Getting the education system to respond to agriculture sector needs

The project of strengthening Higher Agricultural Education in Africa (SHAEA) was initiated by the African leadership and is facilitated by the Universities Network for Capacity Building in Agriculture (UNCF/AFRUM), supported by development partners and financed by the World Bank Group. The participating countries are Cameroon, Cote d’Ivoire, Ghana, Kenya, Malawi, and Mozambique.

This innovative initiative will support the concept of the establishment of Regional Anchor Universities (RAUs) by promoting transformation of selected universities with strong comparative advantage in becoming regional agricultural hubs. It will promote the creation of world-class agricultural faculties with transdisciplinary focus and leadership in Key Gap Areas (KGAs) in which participating universities will have a comparative advantage and have potential to attract faculty, students and partnerships from the respective regions and sub-regions. The project intends to promote innovative partnerships and stimulate close linkages between the agriculture sector and universities.

The SHAEA Project Development Objective is “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. SHAEA will be implemented in 3 components namely:

Component 1: Strengthening Regional Anchor Universities (RAUs) for Agriculture Sector and Regional Knowledge Exchange

• Strengthening RAUs in Regional Key Gap Areas through Transdisciplinary Programs
• Developing Sustainable Institutional Leadership and Management Capacity
• Strengthening Knowledge Exchange and Partnerships of National and Regional Levels

Component 2: Scaling up Impact

• Strengthening Knowledge Exchange and Faculty/Student Mobility Platforms
• Strengthening Regional Institutional Leadership and Management Capacity

Component 3: Regional Level project coordination and technical assistance to RAUs

Regional Anchor Universities (RAUs) are selected based on a competitive call. The selected universities will play a catalytic role to: (a) provide national and regional leadership in developing skilled professionals for agri food systems transformation; (b) be a recognized academic leader; (c) support internationalization of higher agricultural education.

RAUs will be at the center of agri-food eco-system with strong linkages with private sectors, farmers, policy think-tanks, government agencies, and regional and international universities.

Cereal yields have accelerated in Sub-Saharan Africa since the 1990s (doubling the cereal yield growth rate), but they are not rising fast enough to meet growing food demand. If projected food demand to 2030 in Sub-Saharan Africa is to be met, more than 3% per year (above 2.2% rate achieved 2000-14), notwithstanding climate change’s negative impacts and potential development tradeoffs, i.e., with the environment.