



STRENGTHENING HIGHER AGRICULTURAL EDUCATION IN AFRICA (SHAEA): DESCRIPTION AND SELECTED FINDINGS TO DATE

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Description of SHEA Study

1. Purpose

- Inform both the regional dialogue on higher agriculture education, and the design and early implementation of the SHAEA project

2. Methods and Timeline

- June – Sep: Malawi, Mozambique
- Oct - Nov: Kenya, Cote d'Ivoire, Ghana, Cameroon
- Literature review, Ag business surveys, key informant interviews, focus groups

3. Priority: stakeholder engagement

- Further justification for SHAEA
- Contextualized ideas to operationalize Regional Anchor University (RAU) model

SHAEA Study Questions

1. How will the characteristics of agriculture and the food industry in Africa change over the next 30 years (ownership, structure, management, technology)?
2. How will the changes in agriculture and the food industry over the next 30 years change public and private sector educational needs?
3. What are the constraints in the current agricultural higher education system to delivering future educational needs?
4. What changes in the institutional architecture at regional and country level are needed to meet these needs?

5 ASPECTS OF AGRI-FOOD SYSTEM TRANSFORMATION IN AFRICA

1. Rapid employment growth in agricultural value chains
2. Rapid dietary transformation -- growth in demand for processed foods
3. Rise of commercialized medium-scale farms
4. Greater vibrancy of agricultural input markets
5. Improved market access conditions for African farmers

5 ASPECTS OF AGRI-FOOD SYSTEM TRANSFORMATION IN AFRICA

1. Rapid employment growth in agricultural value chains

Business management, accounting, marketing skills,

2. Rapid dietary transformation -- growth in demand for processed foods

food technology/science; nutrition; public policy

3. Rise of commercialized medium-scale farms

Farm management, agronomy, accounting, marketing skills

4. Greater vibrancy of agricultural input markets

Business/marketing/economics related to ag and food systems

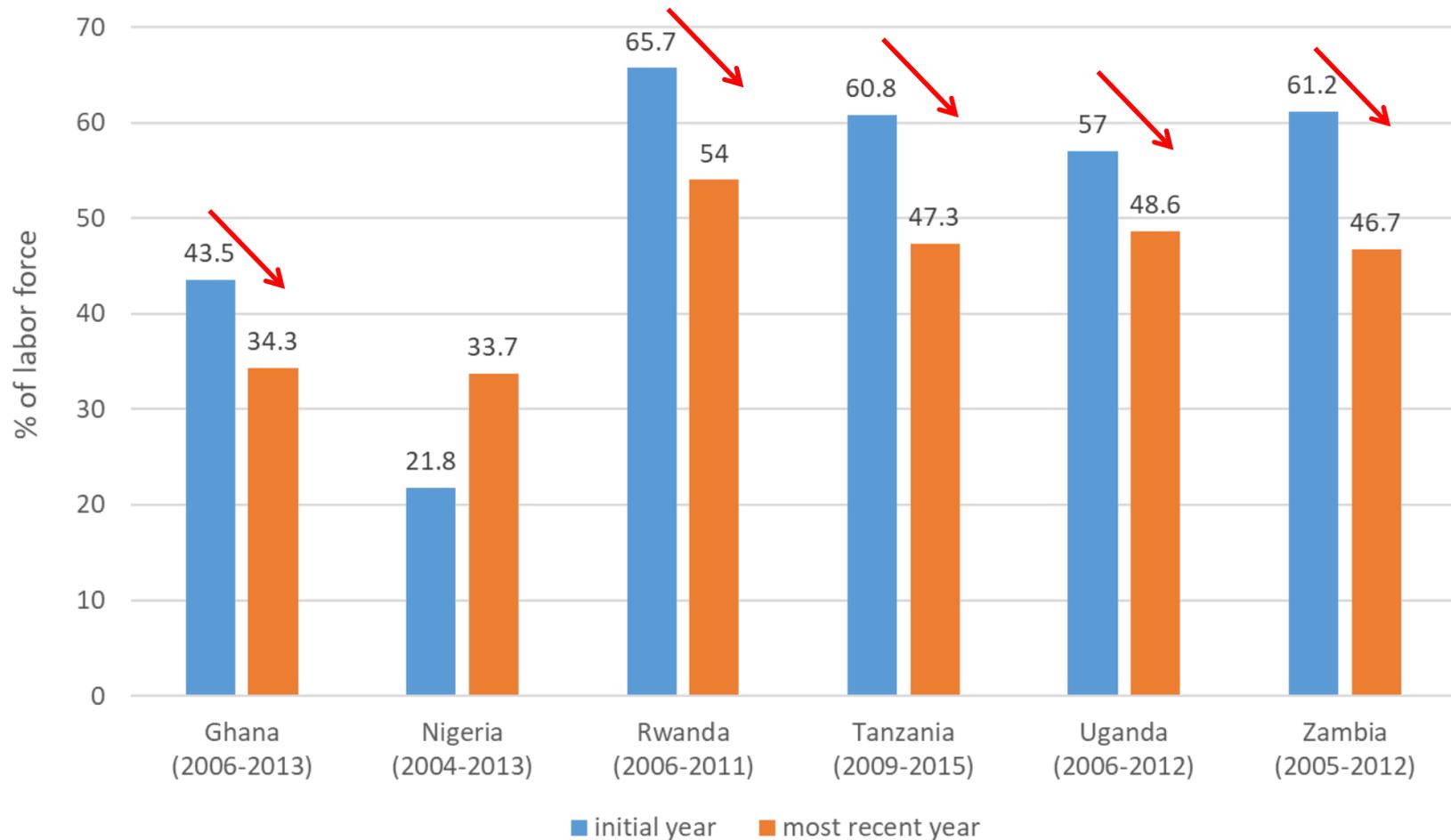
5. Improved market access conditions for African farmers

Marketing, accounting, business management skills

Key points about African agri-food systems

- The “private sector” is primarily composed of micro-businesses in the informal sector
- Even though salaried employees in bigger agribusiness firms are growing rapidly, the vast majority of people employed in Africa’s agri-food systems are part-time or full-time entrepreneurs running their own micro-businesses
- Hence the need for basic business management, accounting, economics, marketing skills for small business owners – how to effectively provide these to people who will not step foot on a university campus?₆

RAPID DECLINE IN SHARE OF LABOR FORCE IN FARMING (IN FULL-TIME EQUIVALENTS)



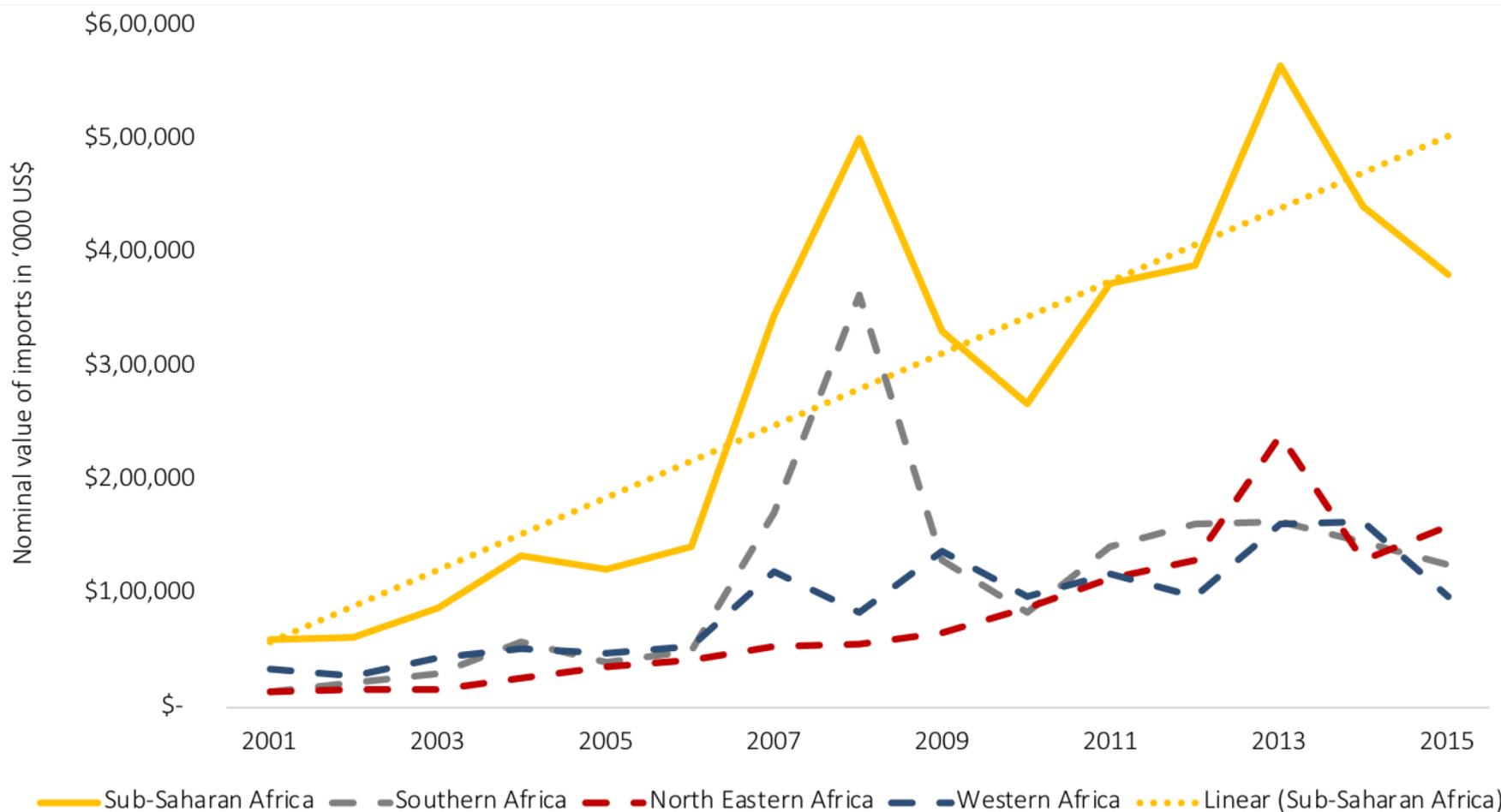
Source: Yeboah and Jayne (2018)

MAJORITY OF OFF-FARM AGRI-FOOD SYSTEM JOBS IN COMMERCE, MUCH LESS IN AGRO-PROCESSING

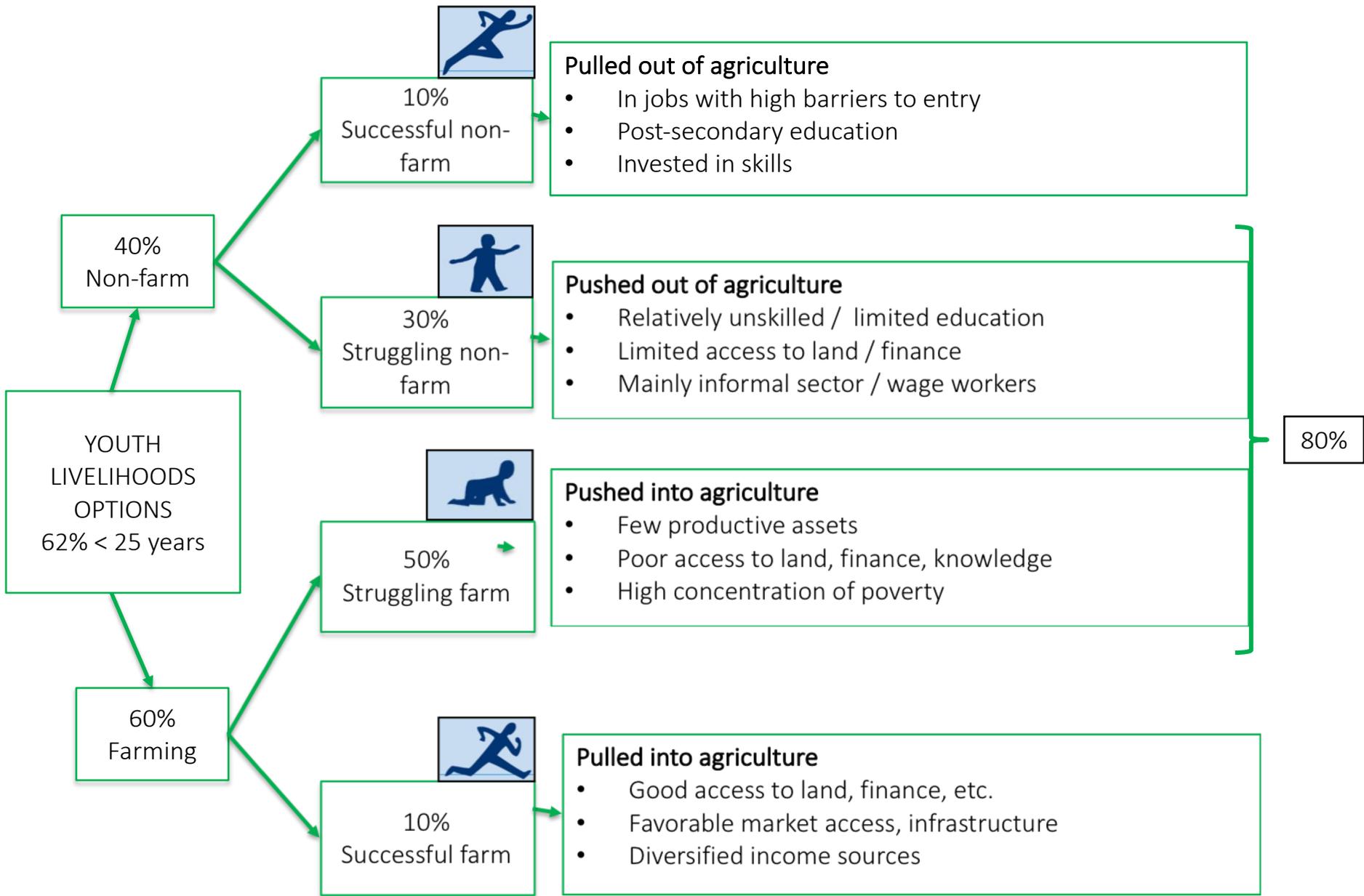
Country	Survey years	Farming	Agro-processing	Downstream commerce and distribution	Non-farm
		% of FTE jobs	% of FTE jobs	% of FTE jobs	% of FTE jobs
Ghana	2005/06	43.5	6.3	8.6	41.6
	2012/13	34.3	3.7	15.5	46.5
Nigeria	2010/11	30.6	2.3	18.7	48.2
	2012/13	33.7	4.6	18.6	43.1
Rwanda	2005/06	65.7	0.4	7.4	26.6
	2010/11	54.0	1.2	7.7	37.0
Tanzania	2010/11	47.3	2.5	15.0	35.2
	2012/13	48.3	1.6	15.6	34.5
Uganda	2005/06	57.0	2.8	10.2	30.0
	2011/12	48.6	1.7	12.0	37.7
Zambia	2005	61.2	1.6	3.1	34.1
	2012	46.7	2.1	7.1	44.1

Source: Yeboah and Jayne (2018)

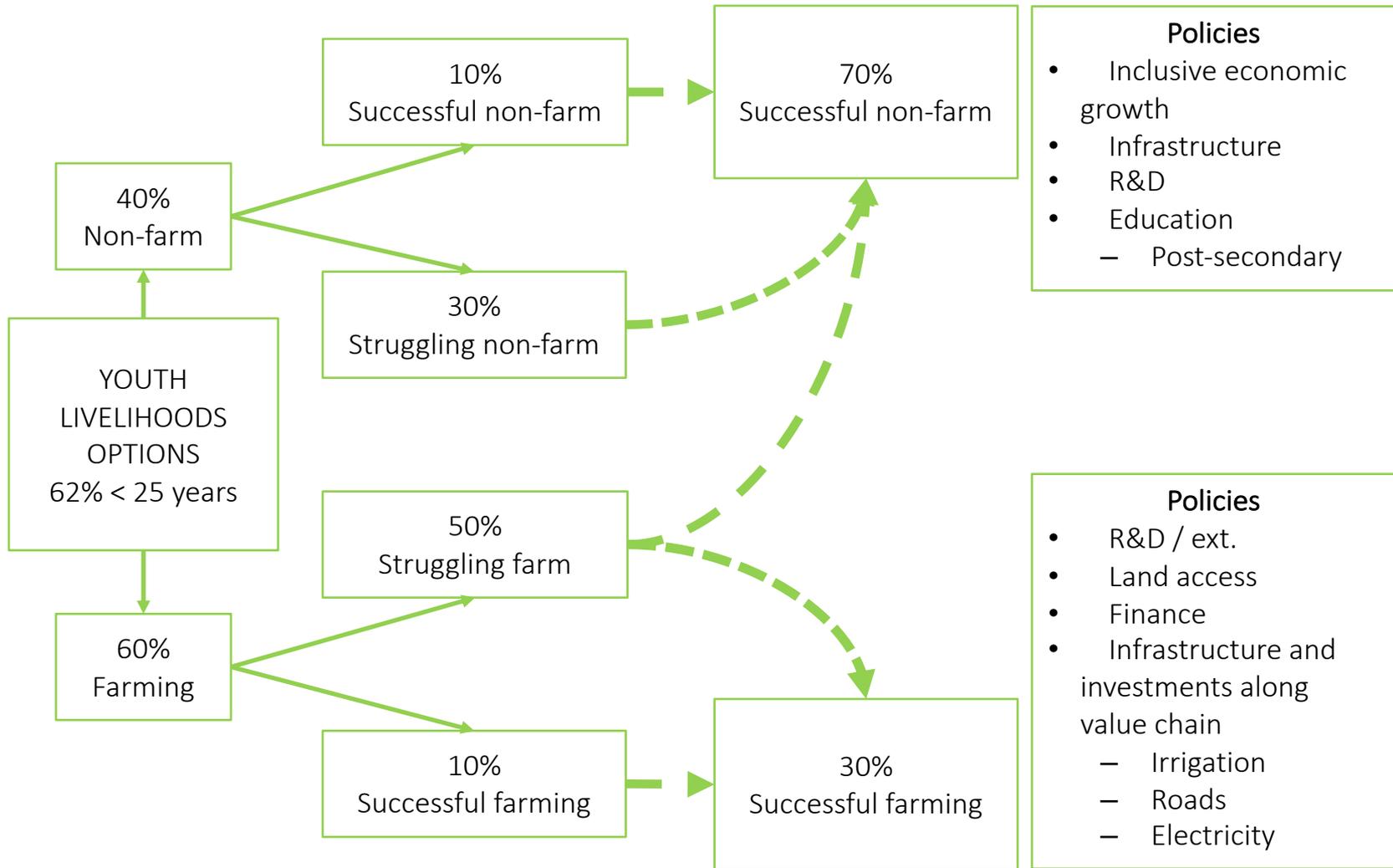
NOMINAL VALUE OF TRACTOR IMPORTS TO SUB-SAHARAN AFRICA (EXCL. SOUTH AFRICA), 2001-2015



Source: Van der Westhuisen et al, 2018, based on Trade Map database



STRUCTURAL TRANSFORMATION PATHWAY



Necessary Responses of Higher Agricultural Education to the Changing Landscape of African Agrifood Systems

Challenge 1: How can African universities generate greater demand by the public and private sectors for the goods and services that they provide?

- **Opportunity:** Design and implement experiential learning opportunities, internships, innovative pedagogies and increase private sector engagement in curriculum design and delivery

Challenge 2: How can African HEIs maintain quality teaching and guidance to students when demand for agricultural higher education is expanding rapidly?

- **Opportunity:** Share models of best quality teaching occurring on the continent, as well as design and implement regional and joint degree programs with partner institutions within and outside of Africa

Challenge 3: How can African HEIs improve incentives for faculty members to contribute to their departments, programs, and universities.

- **Opportunity:** Explore ways to increase salaries to internationally competitive rates, enable researchers to develop satisfying research programs, and implement annual performance contracts accountable to an external committee for deliverables, including high quality research and teaching outcomes.

Necessary Responses of Higher Agricultural Education to the Changing Landscape of African Agrifood Systems

Challenge 4: How can regional anchor universities support the expansion and improvement of agricultural TVET programs?

- **Opportunity:** Design and adopt national education policies which harmonize the relationship among universities and TVET systems. A sustainable agricultural training and vocational program under CAADP supported by the German BMZ may provide a model for consideration and potential expansion.

Challenge 5: How can institutions effectively implement reforms initiated at the top without imposing unanticipated burdens on faculty and staff?

- **Opportunity:** For university reforms requiring the participation of faculty and staff, develop consultative processes that enlist faculty from the beginning so that their needs are incorporated into final plans for reform and capacity building.

Challenge 6: How can universities address high rates of student attrition, especially among women?

- **Opportunity:** identify innovative educational finance schemes from other institutions/countries or work with the national government to expand access to loans. Develop bridge and mentoring programs, based on successful models, for women students.

Necessary Responses of Higher Agricultural Education to the Changing Landscape of African Agrifood Systems

Challenge 7: How can benefits from programs such as the African Centers of Excellence and research institutes be more widely institutionalized?

- **Opportunity:** Develop better integration and communication between research institutes and programs and their home institutions rather than creating parallel systems (for research, accounting, etc.). Reinforce good practices across the institution.

Challenge 8: How to upgrade the quality of incoming university students?

- **Opportunity:** Teacher training programs at universities can help to raise the quality of teaching in primary and secondary schools. Universities can lobby for national education reform strategies.

Challenge 9: How can universities support student transitions into post-graduation opportunities (employment, entrepreneurship, etc.), i.e., career development.

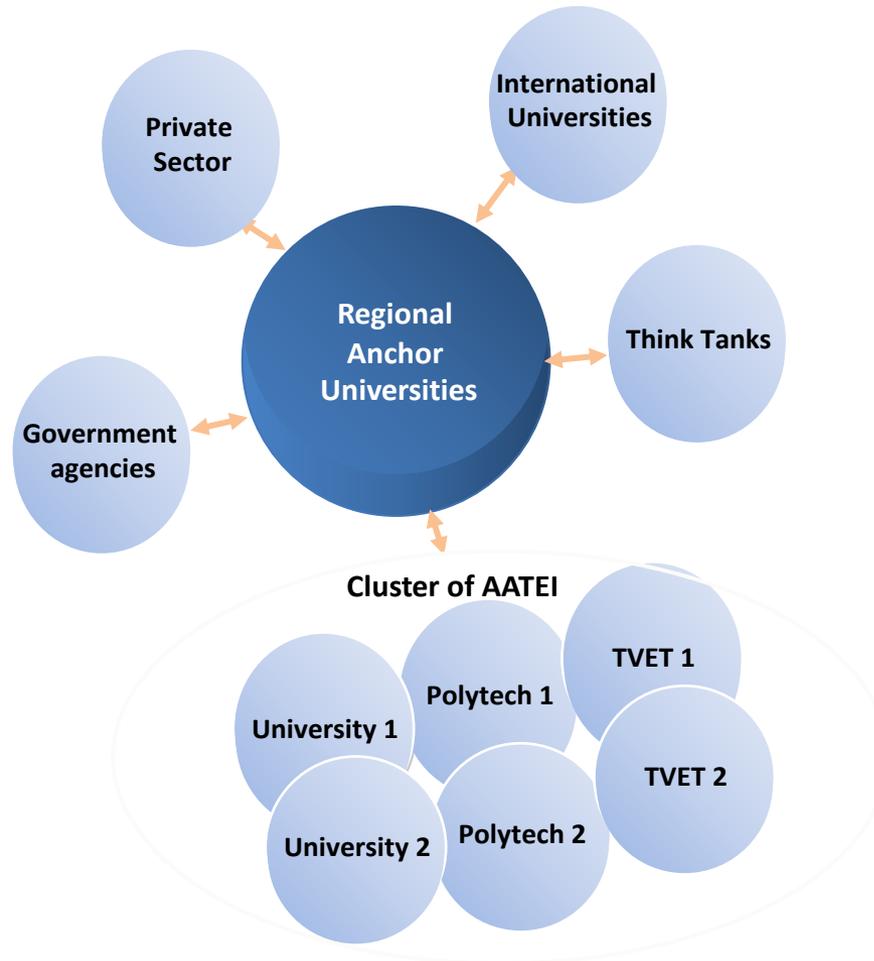
- **Opportunity:** Design and create career development centers or similar support structures as well as innovation/entrepreneurship incubators which can provide follow on support for alumni.

Additional Preliminary Recommendations

1. Design contextualized approaches to operationalize new educational pedagogies, student experiences, and pathways that are flexible and responsive to anticipated, rapid food system transformation
2. Link proposals to the national agricultural investment plans & complement in the areas of agricultural education and training
3. Collaborate with ongoing multi-donor initiatives developing small- and medium- scale enterprises; identify top agribusinesses that will work with HAE system to provide practical student experience
4. HAE needs investment both in physical infrastructure and in human resources to meet the growing demand for capacity and skills in the agricultural sector

Regional Anchor Universities

heart of project design + catalytic role in the region



Questions & Comments for SHAEA Study Team

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