AFRICAN NATURAL PRODUCTS RESEARCH AND TRAINING NETWORK (RISE - AFNNET) REGIONAL INITIATIVE IN SCIENCE AND EDUCATION

By Professor John David Kabasa, RISE-AFNNET Director, Makerere University

RISE-AFNNET Innovation System: a case study of the AFRISA ACP3 model for transformative higher education networks in Africa
REALITIES: Global, Regional & National Paradigm Shift

One World
One Economy
One Health
One Region

The focus: people, integration, and a sustainable planet for all
Staggering with the Globalization Elephant
21st Century Africa: “a Global Risk Incubator”- Bioinsecurity, Poor Health, Unskilled & unemployed; Cordonned off & suffocated by global Standards. What went wrong?

Africa Education Systems at cross-roads:

- > 70% global zoonoses, emerging & re-emerging Transnational diseases - in SSA.
- Africa’s share in global livestock trade dropped from 5 to < 1%
- > 70% global HIV-infected - in SSA. HIV-complicated by Zoonoses e.g. TB
- > 50% of herds sold to health bills of HIV/AIDS affected livestock farming households - in Uganda
- Most active age Gp (18-35 yrs) struck
- > 70% popn < 40 yrs - in SSA
21st Century Africa: Zoonoses; Cocktail families, Unsafe products; Trans-boundary Animal Diseases. What went wrong with Africa Education Systems?
21st Century Africa: Climate Change vulnerability, Warming Pathogen & Vector dynamics, water & feed stress, Biodiversity loss

Watering the animal & humans
January 2007
21st Century Africa: Conflicts, Exploding Youth Populations; Unemployment, Mass Urbanization

Africa Education systems at cross-roads: what went wrong? -
21st Century Africa: Westernization Confounds the system – Growing middle class grappling with western culture
Pessimistic Message 1: 21st Century Africa is either paralyzed or besieged! No longer an Island, Lost historical freedom from Diseases, independence.
Message 2: Africa’s Historical Mistake was a sustained imitation, a narrow perspective and approach to Higher education and capacity building.

• Sustained Colonial & Ancient models of education & capacity building
• Sustained Westernization & Imitation
• Imitation is limitation!
• Originality in African Higher Education is urgently needed
Africa poverty industry is a blessing / a curse?
Youth have a lot of work to do. Lets capacitate them
Message 3: 21st Century Africa – is rich, gifted by nature – rich in natural resources, rich in biodiversity. Africa’s biodiversity should not be displaced without understanding its potential to future generations.
RISE-AFNNET Alternative thinking: harnessing a rich and diverse African biodiversity provides immense job opportunities for Africans including youth.
Foot Print of the Neglected African Natural Products Industry & Value Chains

• Biomolecules and compounds abundant in Africa’s rich biodiversity be it disease germs or snake poisons are the basis for a vibrant science and technology industry in Africa. The biomolecules are precursors for many industrial products across value chains including: vaccines, medicines and drugs, cosmetics, condiments, dyes, herbal products, nutraceuticals, insecticides, environmental and industrial enzymes, etc.
ANY sustained development of a nation depends on the quality and quantity of its skilled human capital.

Higher Education Institutions (HEIs) are the fulcrum of development in Africa. HEIs are at the centre of a sustainable Public -Private Sector interface.

To address these, RISE-AFNNET was founded by Makerere University, University of Nairobi and Sokoine University with the support of the Carnegie Corporation of New York through the SIG and AAS.
Three Core Functions

Teaching & Learning

Research

Services (Knowledge & Technology Transfer partnerships)
Rise-Afnnet Strategy Focus (SF) / Model

Communicating Performance Achievements, Improvement Plans and Vision Impact

**Availability**
Essential and one-choice is Accessibility, Affordability and Reliability on basic Human & Natural Sustaining, Supportive, Resources, Products & Services, Knowledge Acquisition & Know-How Perfection, Strategic Research and Development + Training Programs, aimed at enabling healthier and wealthier majority especially among the disadvantaged

**Accessibility**
Availability of resources, products, education, services, etc, is not adequate without one having to manage accessibility challenges related to: Distance (Location) & Delivery Time Leads, Commercial Delivery Systems (tools & processes and commercial practices), Access to Voice/Data Communication Infrastructure Channels, Legal/Commercial Policies, Rules and Regulations, etc, and obviously Personal Affordability Capacities

**Affordability**
Securing Availability and Accessibility of/to resources, knowledge, products, services, etc, is good enough provided that one is able to prioritise Personal Desired Vision, Personal Entrepreneurship Creativity, Productivity and that tied to Managing the Environmental Living Factors and Surroundings, Acquaintance with the reachable Delivery Systems & Process Streams that lie within areas of his/her influence

**Reliability**
Successful Leadership and Management must secure that Availability, Accessibility and Affordability of Resources, Knowledge, Services, etc, lead to achievement of desired delivery, Quality Levels & Risk Management, Customer Support, Trust, Loyalty, Experience and Satisfaction Targets

**Sustainability**
Managing Stakeholders’ Requirements, Expectations, Experience & Satisfaction through constant evaluation, analysis and improvement of the 4 ARMS And: Communicating Performance Achievements and Improvements in progress is what will lead to achieving the Vision and Mission

**Societal**
Communicating Performance Achievements, Improvement Plans and Vision Impact

Management Communication Feedback, Strategy Review and Improvement Program Management Communication

**Science & Education Leadership & Management**
Organisational Governance, Strategy & Business Operations, and Accountability Management
VISION OF AFRISA
• Wealthier and Healthier Communities in Africa

MISSION OF AFRISA
• To nurture a productive and entrepreneurial generation through transformative Learning and Skills, Technology and Innovations, Community Services, and academic-community-public-private partnerships
Strategic Priorities

1. Securing “One Health” – (Health for the people, animals, water, environment) through freedom and safety from disease, hunger, stress
2. Securing the current and future bio-resources as assets for the people
3. Improving the productivity of bio-resource systems
4. Building Human capital to enhance engagement and competitiveness of the populations
5. Enhancing participation in available markets and marketing
6. Enhancing Science, Technology & Innovations (STI)
7. Strengthening Policy development
AFRISA ACP3 INCUBATION MODEL

A transformative Academic-Public-Private Partnership (AP³) Model for Incubation of STI, Enterprises, Skills for Youth and Community in the Animal Industry
AFRISA ACP³ MODEL FOR INTEGRATED SERVICE LEARNING, VALUE ADDITION, ENTERPRISES, SKILLS & TECHNOLOGY DEVELOPMENT
AFRISA: the Academic-Public-Private Partnership (ACP3) model for STI, Skills, Enterprise & Technology Development
Conclusion

Networks work well – they are an STI incubation and multiplier platform, promote synergy & sharing, uphold mutuality, and promote regional mobility and integration.

Thank You!

Asante sana; Amesegnalehu; Merci beaucoup; Thank you