

Quality Assurance in African Agricultural Education and Training



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Vernon Ruttan in 1991 – author of “Induced Innovation”

“The thing that bothers me is that the donors have consistently tried to avoid the issue of institution-building in Africa. In South and Southeast Asia in the 1950s, the donors were building the institutional capacity it took to create the growth that began in the 1960s. In the 1970s, we didn’t do it in Africa because we were on the basic needs and rural development kick. An agronomist was viewed as doing elite stuff. A plant breeder was even more elite. I think it’s time that the donors begin to take the issue of institution-building seriously or in 2010 we are going to be having this same conversation.”

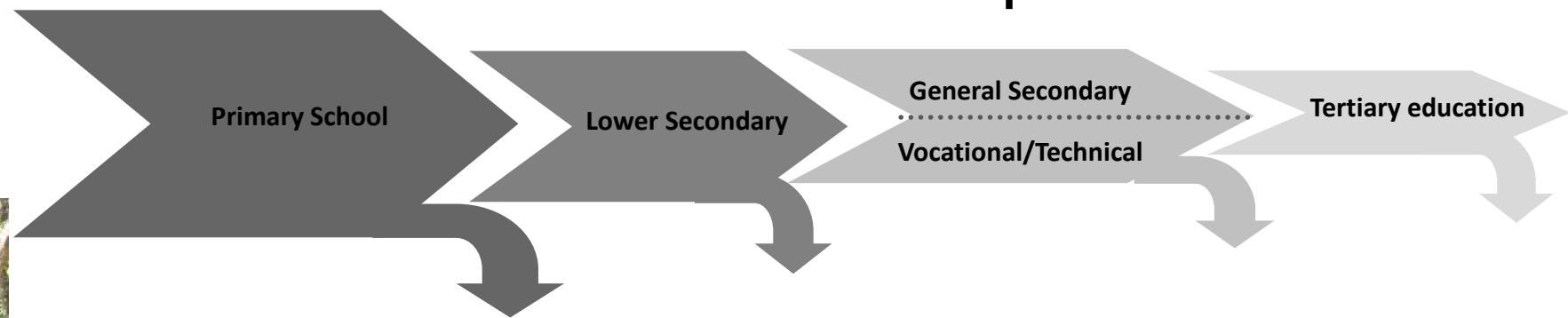
Statement presented at a Seminar on African development: Lessons from Asia.
Winrock International: Morrilton, Arkansas

Supply

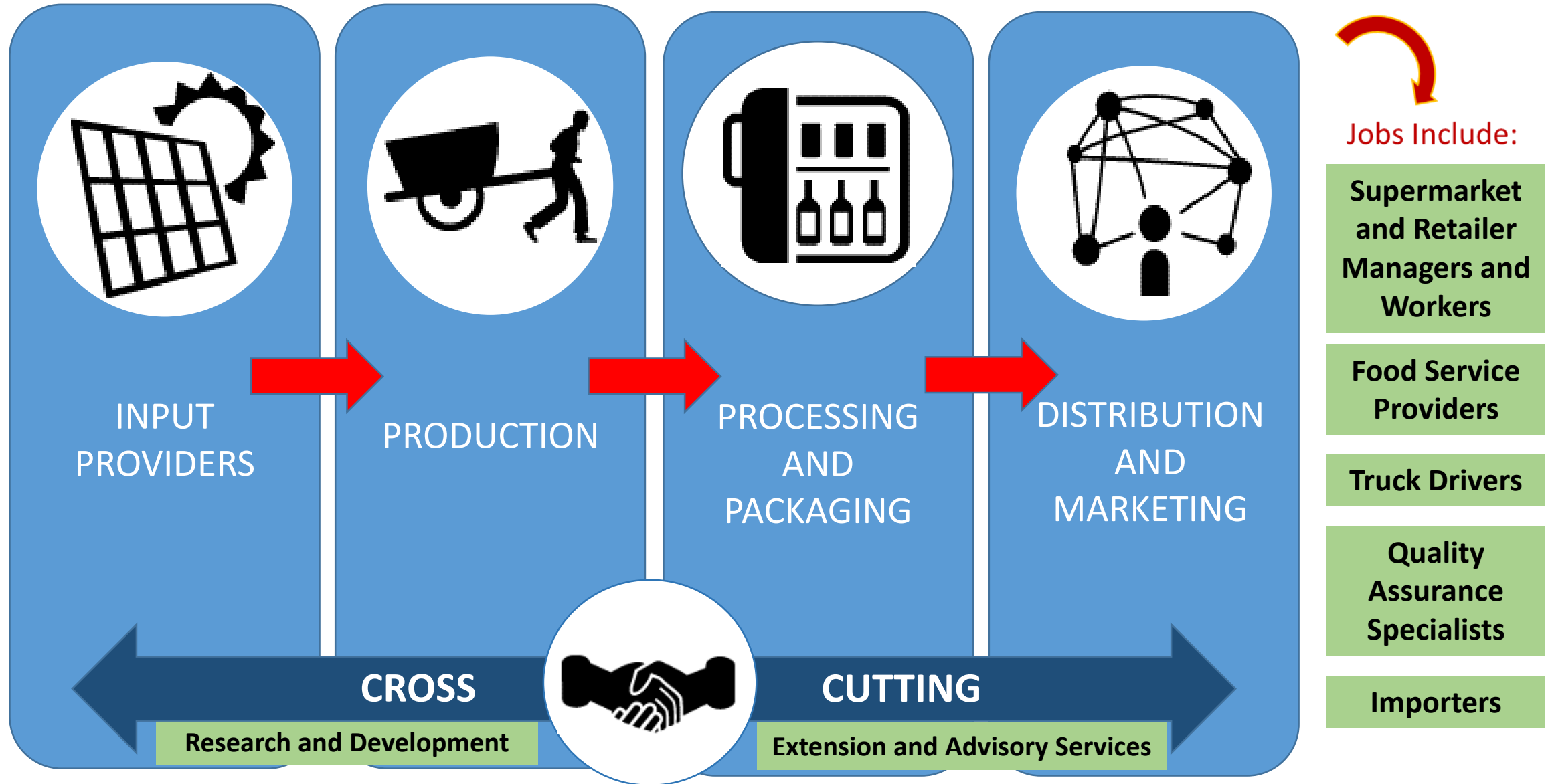


Demand

Education Pipeline

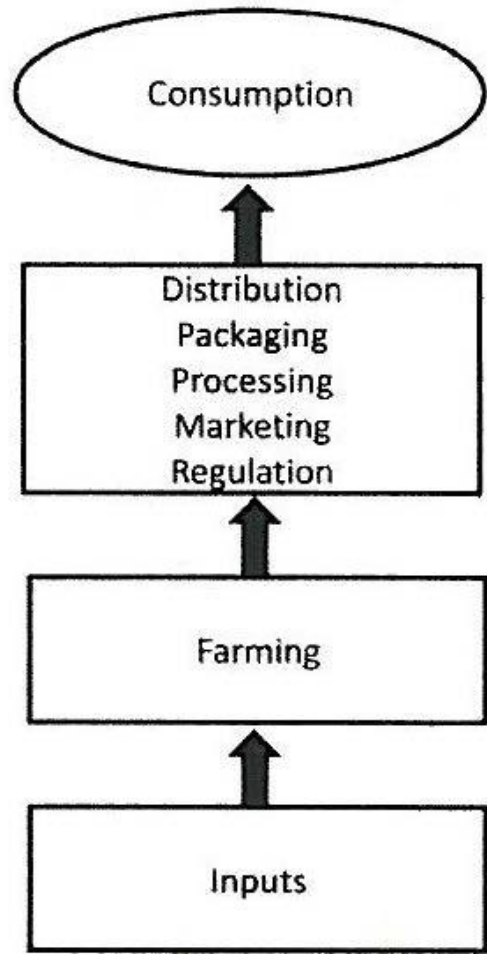


Jobs Along the Agricultural Value Chain



Shifting Locus of Labor Demand

Food value chain



Skill requirements

- Food policy
- Nutrition
- Food safety
- Packaging
- Food biochemistry
- Logistics mgmt
- Supply chain mgmt
- Financial mgmt

Growth, 2010-2050

5-6X

Employment sector

Mostly Private

- Plant breeding/agronomy
- Entomology
- Animal science
- Vet. medicine
- Extension

2-3X

Mostly public

- Chemistry
- Engineering
- Marketing

10X

Mostly private



Figure 3.5. The shifting locus of labour demand (Tschirley and Démbele, 2011).

Agricultural education and training faces two challenges

An unbalanced **institutional culture** in which

- Education is seen as transferring knowledge created elsewhere
- Research is seen as creating that knowledge
- Learning is not perceived as a creative activity

An dynamic **institutional context** in which

- Change is endemic, involving climate change and volatile markets
- Innovation, adaptive management and entrepreneurship are required

Changes in the Underlying Paradigm

From knowledge as dependent on externally fixed science

- Farming Systems Research and Extension (FSR/E)
- Agricultural Knowledge and Information Systems (AKIS)

To a learning paradigm for managing complex adaptive systems

- Agricultural Innovation Systems (AIS)

A shift from research to learning

Learning is not something we do apart from the world we live in

Knowledge and action are simultaneous

Fostering Technical Change in Agriculture

- How does adaptive management change agricultural education and training?
- What is the role of learning in the process of innovation?
 - Is learning a matter of information transfer resulting in adoption of innovations?
 - Or, is learning a matter of developing capacities for on-going adaptation?
- Whose capacities should be developed?
- Where does innovation occur?



Institutional Self-Assessment Experiences

In Liberia:

- College of Agriculture and Forestry (CAF), University of Liberia
- Forestry Training Institute (FTI), Tubmanburg

In Senegal:

- The *Institut Supérieur de Formation Agricole et Rurale* (ISFAR) of Bambey
- The *École Nationale Supérieure d'Agriculture* (ENSA) of Thiès
- The Department of Agroforestry of the *Université Assane Seck de Ziguinchor* (UASZ)
- The *Centre National de Formation des Techniciens des Eaux, Forêts, Chasse et Parcs National* (CNFTEFCPN) of Djibelor
- The *Lycée Technique Agricole Emile Badiane* (LTAEB) of Bignona

in collaboration with: Autorité National de l'Assurance Qualité – Sénégal

Institutional Self-Assessments

The task of these assessments is to initiate a **self-reflection process**

among faculty and administrators at the university or other institution of higher education in a **structured way**

This process is designed to:

- (1) improve overall **quality** of agricultural professionals;
- (2) demonstrate **accountability**; and
- (3) encourage scrutiny and planning for change and needed **improvement**.



Institutional Self-Assessments

The criteria for professional agricultural education assessment are based on **six Standards**:

1. the mission, goals, and objectives of the program,
2. the curriculum,
3. program organization and administration,
4. faculty,
5. students, and
6. parent institution support.

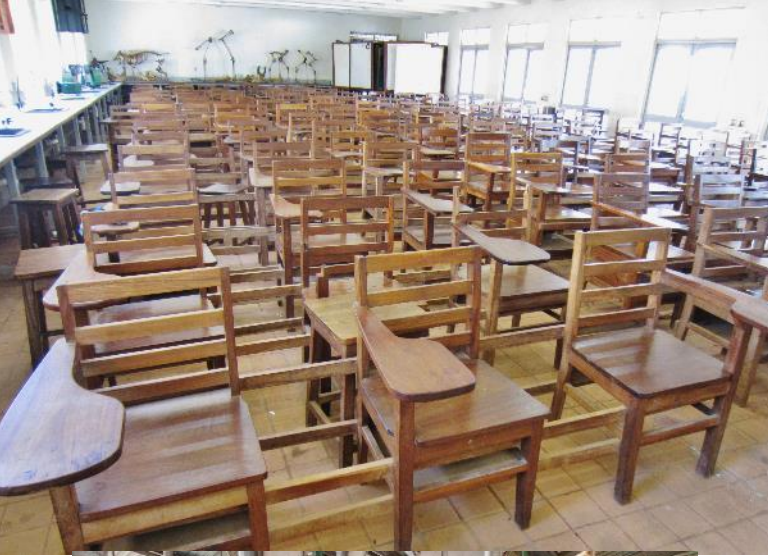


Institutional Self-Assessments

The process:

1. **Documenting** current conditions as measured by the 6 Standards
2. Internal faculty **review and reflection** concerning practices associated with each Standard
3. **Drafting** responses to the agreed to set of questions to be shared with an external review team
4. **Presentation** of the final report to the wider body of stakeholders in the agricultural sector





The Educational Challenge

Instructional quality is characterized by:

- Professor reading from the notes he took as a student
- Science is taught as the memorization of facts
- A lack of syllabi and their use
- A lack of coherence between learning objectives, pedagogical practices, and student assessment



Although experiential learning is valued and emphasized by faculty and administrators, the tradition of memorization is profoundly engrained.

Underfunding agricultural education leads to **low morale and rent-seeking behaviors** of talented faculty members.



There is a lack of **incentives for quality** (student-oriented) **teaching** suggesting that even minimal rewards may help to re-focus efforts.

Some final observations

Self-assessments require faculty and administrative support, an institutional commitment. This commitment appears to vary according to academic level.

- Secondary schools and technical institutes are more easily mobilized
- University faculties find the process just another burden

Individuals take on teaching assignments across multiple institutions leading to:

- Lack of precision in indicators (i.e., teacher-student ratios)
- Reliance on non-permanent faculty undermines the quality and integrity of an institution's curriculum

Thank you



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