



# Bringing Technologies, Information and Knowledge to Farmers in Africa

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## **Recent Trends in African Agriculture**

# ...African agriculture still require considerable interventions

Agriculture is the sector with the potentials to drive Africa's inclusive growth agenda.



## Mega trends affecting agriculture in Africa ...1/3

- 1. Population growth, Youth & urbanisation
- 2. Growing affluence
- Changing dietary patterns:
   † demand for animal protein,
   more attention on food
   safety, quality & nutrition







## Mega trends affecting agriculture in Africa ...2/3

3. Globalised markets & increasing agribusiness Regional integration

4. Climate change and variability









## Mega trends affecting agriculture in Africa ...3/3

5. Rising energy and agricultural input prices



6. ICT proliferation

7. Pressure on genetic resources and biodiversity





## Issues for attention in Africa Agriculture

Science, technology & innovation require more attention and investments.

Infrastructure for R&D is neglected, inadequate or decaying in many African countries

Eroded quality and relevance of education and research that undermines Africa's capacity to participate in global knowledge production

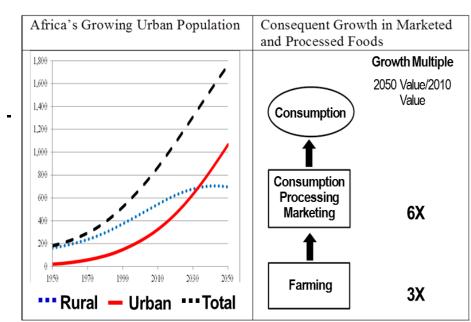


#### ..demands for new capacities for technological solutions

 Productivity 'yield gap' — a constraint of technology ?

Food processing technology - from artisanal to industrial scale

Labor market changing from public to private



Education gap for job market demand



# African ARD has had numerous successes

Varietal improvements (NERICA, climbing beans, mosaic resistant cassava etc)

Alternatives and supplements to expensive inputs (soil fertility, fodder, pest management)

Approaches to R&D (Farming systems research; participatory research, scaling up)

However, the impact of the technologies did not match their potentials

- Institutional setting of the research system can not support scaling up of the technologies.
- Approaches to R&D is not all encompassing.
- Inadequate human and financial resources







# Africa proposition IAR4D

IAR4D concept entails a multi-sectorial, multistakeholders orientation to agricultural problem diagnosis, and draws on integrated approaches using 'hard' and 'soft' sciences to provide solutions, while maximizing the available resources

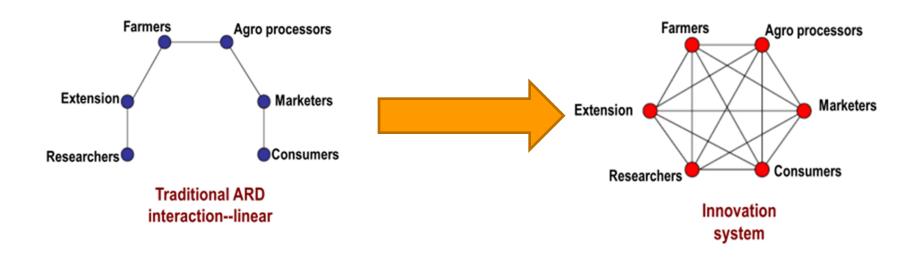
IAR4D is premised on the innovation systems approach and requires systemic interaction among all stakeholders around specific commodity or production system.



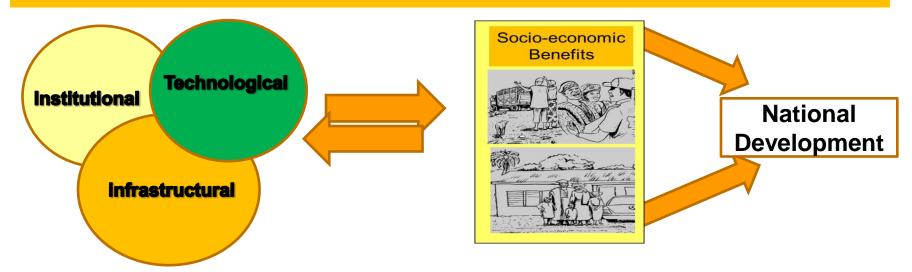




#### # IAR4D offer a transition in research mode

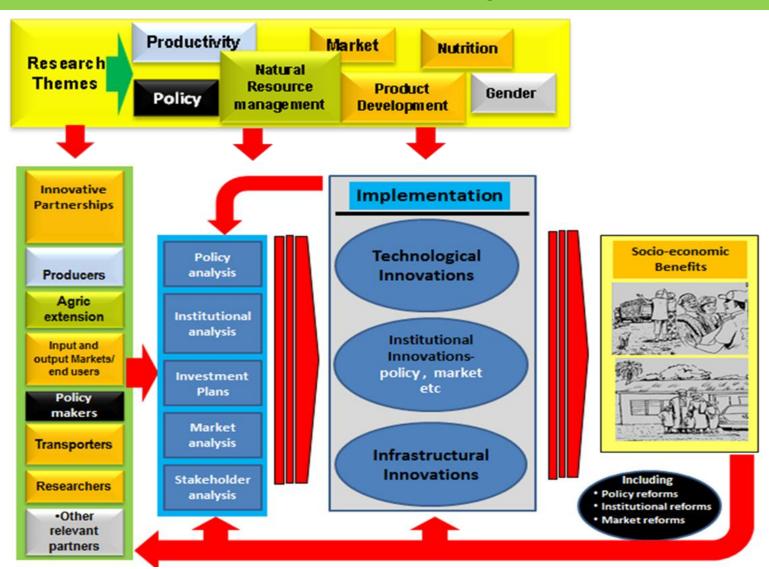


### # Concurrently addresses constraints to Innovation



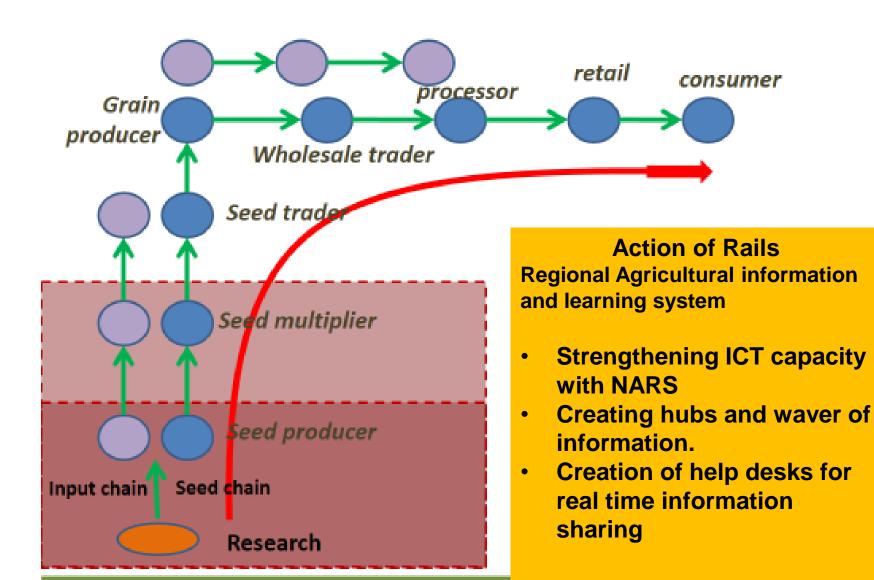


### IAR4D IP turns Knowledge, Information and Skills Into Socioeconomic Benefits on the Innovation platform





# Communicating Knowledge and Technologies Using RAILS Model



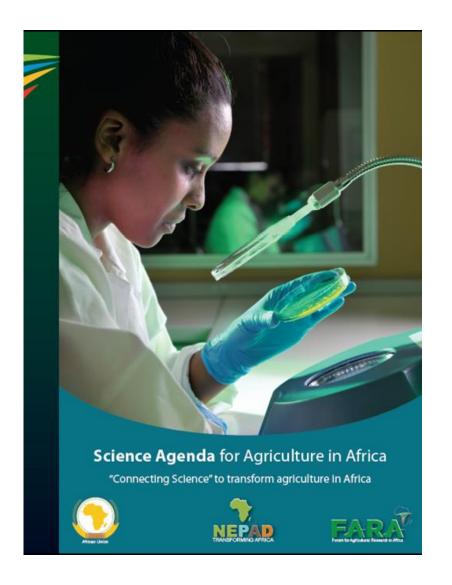


FARA is addressing the issues of

Technology,

Knowledge and information generation and transfer with the...

Science Agenda for Africa Agriculture S3A







# Why a Science Agenda?

- Need for Africa to strengthening its role as a player in the global science for agriculture.
- Science for agriculture in Africa is too important to be outsourced,
- Science is critical for the preservation and use of Africa rich biological heritage.
- Increase investment in science for agriculture in Africa is needed now.
- Africa solidarity in science is an important dimension of the strategy for harnessing the power of science.



## Conclusion

- 1. Communicating knowledge, technologies and information is a missing link in the crave for Africa agricultural development.
- 2. FARA has proposed the IAR4D concept and the Innovation platform as a solution. The interaction on an IP facilitates smooth exchange of information and its utilization.
- 3. Science and technology should be mainstreamed as an essential part of agricultural transformation action in Africa and this will require consistent investment long term planning.
- 4. Science agenda for Africa agriculture is a joint product of all stakeholders in Africa agricultural research and development.
- 5. Africa is poised to orchestrate sustainable science-led agricultural development by operationalizing the science agenda.

