



Sustainable Agricultural Intensification (SAI), Extension & Advisory Services (EAS) and Innovative Institutional Approaches (IIA) Promoted and Implemented in Past & Present in Africa

Deliverable No: 1.1 Report on Stakeholder Knowledge and Scientific Review

Lead partner: NIBIO

Other partners involved: KALRO, HU, RAB, UoM, ARC, SUA & ILRI

Objective: Disseminate *Good Practices & Learning Notes* from six case countries of InnovAfrica project

Key message: Agriculture research should be demand driven, consider needs & challenges of farmers and other value chain actors, contribute to the capacity building, and include nutrition, gender and environment as a cross cutting issue.

ETHIOPIA

- Adoption and dissemination of technologies should be participatory rather than top-down.
- Combination of SAIs provide better results better than use of a single SAI technology.
- Demonstrations, field days, seed fairs and multimedia coverage have accelerated seed dissemination to farmers.

SOUTH AFRICA

- New ideas need to be built on existing practices and priorities of smallholder farmers.
- Environmental concerns need to be embedded during project design phase.
- Access to inputs, materials and tools is a prerequisite for adoption of innovative SAI systems.

KENYA

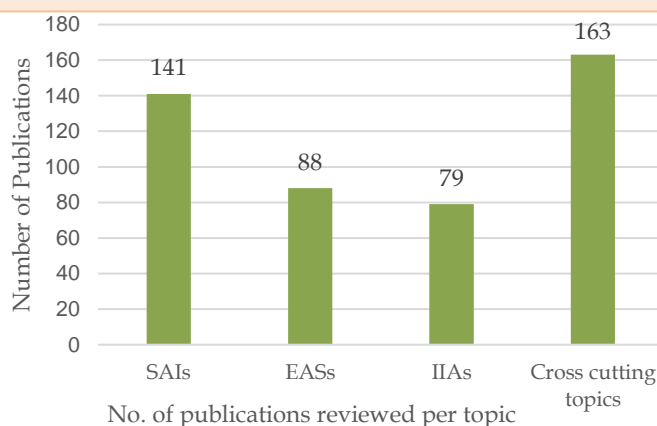
- Agricultural production and improvement will be derived from innovations and intensification.
- EASs strengthen the capacity of farmers knowledge to improve productivity.
- IIAs reduces barrier in systems and facilitate overall product value chain effectiveness.

TANZANIA

- Public EASs currently focus on the production side of agricultural food value chain.
- Many private extension providers are donor/project based and very selective in terms of commodities and services provision.
- Promoting public - private partnership could play a critical role in service delivery system

MALAWI

- Cereals and legume intercropping is embedded in the indigenous knowledge systems.
- Agricultural EASs have shifted from expert-based services to farmer to farmer extension.
- Agricultural projects that are farmer inclusive have shown better results than others.



RWANDA

- Agricultural value chain actors have limited capacity for value addition.
- Major focus is given to sensitize crop intensification program in the consolidated farm land.
- Inadequate postharvest handling and low seed quality coupled with under developed seed systems are indispensable agricultural problems.

Notes: SAIs = Sustainable Agricultural Intensification systems; EASs = Extension & Advisory Services, and IIAs = Innovative Institutional Approaches. Cross cutting topics include climate change, gender, capacity building.

<i>Sustainable Agricultural Intensification</i>	Ethiopia	Kenya	Malawi	Rwanda	S. Africa	Tanzania
Intercropping of legumes with cereals	●	●	●	●	●	●
Use of cover crops		●				●
Animal integration in farming systems	●	●		●		●
Brachiaria grass/ Napier grass	●	●	●	●		●
Push-pull integrated pest management		●				
Agroforestry systems	●	●		●		●
Conservation agriculture	●	●	●	●	●	●
Fanya-juu terraces	●	●		●		●
Contour bunds farming	●		●		●	
Soil cover/mulching	●	●	●	●	●	●
Climate smart agriculture	●	●	●	●	●	●
Organic farming/ compost manuring	●	●	●	●	●	●
Soil and water conservation/harvesting	●	●	●	●	●	●
Integrated soil fertility management	●			●		

Note: Size of circles is proportionate to the intensity of interventions in each case country



A farmer in Brachiaria field at Machakos County, Kenya (Photo: KALRO)



Maize & bean intercropping in conservation agriculture at Embu County, Kenya (Photo: BecA-ILRI Hub)

<i>Extension & Advisory Services</i>	Ethiopia	Kenya	Malawi	Rwanda	S. Africa	Tanzania
Farming systems research & extension	●	●	●	●	●	●
Training and visit system	●	●	●	●	●	●
Farmer field schools/ Farmer training centre	●	●	●	●	●	●
Demand-driven extension/ Participatory extension	●	●	●	●	●	●
Farmer-to-farmer extension	●	●	●	●	●	●
Integrated farm plan (PIP)	●			●	●	
Private agricultural extension	●	●		●	●	●
ICT-based extension/ village knowledge centre		●				●
Government led top-down extension	●	●	●	●	●	●
<i>Innovative Institutional Approaches</i>						
Multi-actor innovation platforms	●	●	●	●	●	●
Integrated seed delivery system	●		●			●

Note: Size of circles is proportionate to the intensity of interventions in each case country

REFERENCES

- Tesfai M, Njarui D, Paul G, Westengen O and Ghimire, S. (eds.) (2018). Report on Stakeholder Knowledge and Scientific Review: Sustainable Agriculture Intensification, Extension and Advisory Services and Institutional Approaches in Africa- An Interdisciplinary Review (Del. 1.1.)
- <http://www.innovafrica.eu/>



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