



Africa **R**esearch **I**n **S**ustainable **I**ntensification for the **N**ext **G**eneration (Africa **RISING**)

Regis Chikowo (and many others)
International Institute of Tropical Agriculture
Michigan State University
University of Zimbabwe



Who are we?

Africa RISING program comprises three research for development projects supported by USAID as part of the Feed the Future initiative



How are we organized -three regional projects

East and Southern Africa (IITA)	West Africa (IITA)	Ethiopia (ILRI)
Tanzania Malawi Zambia	Mali Ghana	Ethiopian Highlands

The International Food Policy Research Institute leads the program's monitoring, evaluation and impact assessment



Our philosophy

Through action research and development partnerships, Africa RISING is creating opportunities for smallholder farm households to move out of hunger and poverty through sustainably intensified farming systems that

- ü improve food security,
- ü nutrition security, and
- ü income security,



Research outputs

Output 1: Situation analysis and program-wide synthesis.

Output 2: Integrated Systems Improvement

Output 3: Scaling and Delivery

Output 4: Monitoring and Evaluation



Africa RISING Malawi



Agro-ecological Intensification through action research with smallholder farmers in Malawi

Regis Chikowo, Sieg Snapp -MSU

Wezi Mhango – LUANAR Agronomy

Fanny Chigwa –LUANR Animal Science Department

Agness Mangwela –LUANAR Nutrition Department

Isaac Nyoka–ICRAF

Desta Lulseged, Rowland Chirwa – CIAT

Owen Kumwenda & Anilly Msukwa – DAES

WUR

IFPRI



The story is clear





Maybe clearer with this one...





Within farm Contrasts





Alarming yield gaps ??

Crop	Actual yields (t/ha)		Attainable yields (t/ha)
Maize	1		5+
Soyabean	0.6		1.8+
Groundnut	0.5		1.5+



Closing the yield gaps:

§ Requires knowledge assimilation by farmers through simple pathways

§ Plausible approaches include learning by doing – farmers empowered through experimentation



Harnessing nitrogen.....





Rhizobiology with farmers – the N factories





Introducing improved germplasm and appropriate management -the possibilities..





When land is too constraining..

§ Increasing land productivity is a must

ü We have to go an extra mile with our innovations

Ø Moving beyond picking the ‘low hanging fruits’



The doubled-up legume technology

Intercropping two grain legumes

- § Legume –legume intercrops (double legume)
based on different crop growth habits /architecture
- ü one of the crops starts growth slowly
- ü Both crops planted at their optimum spacing (as in
sole cropping – additive intercropping design)
- ∅ two grain crops harvested
- ∅ soil fertility benefits larger



Doubled-up legumes – intercropping 2 legumes that have little inter-specific competition for resources





When groundnut is almost mature, pigeonpea begins vigorous growth



Understorey groundnut has since been harvested...!!!





What are the opportunities for this ?..





Establishing fodder trees around farm boundaries





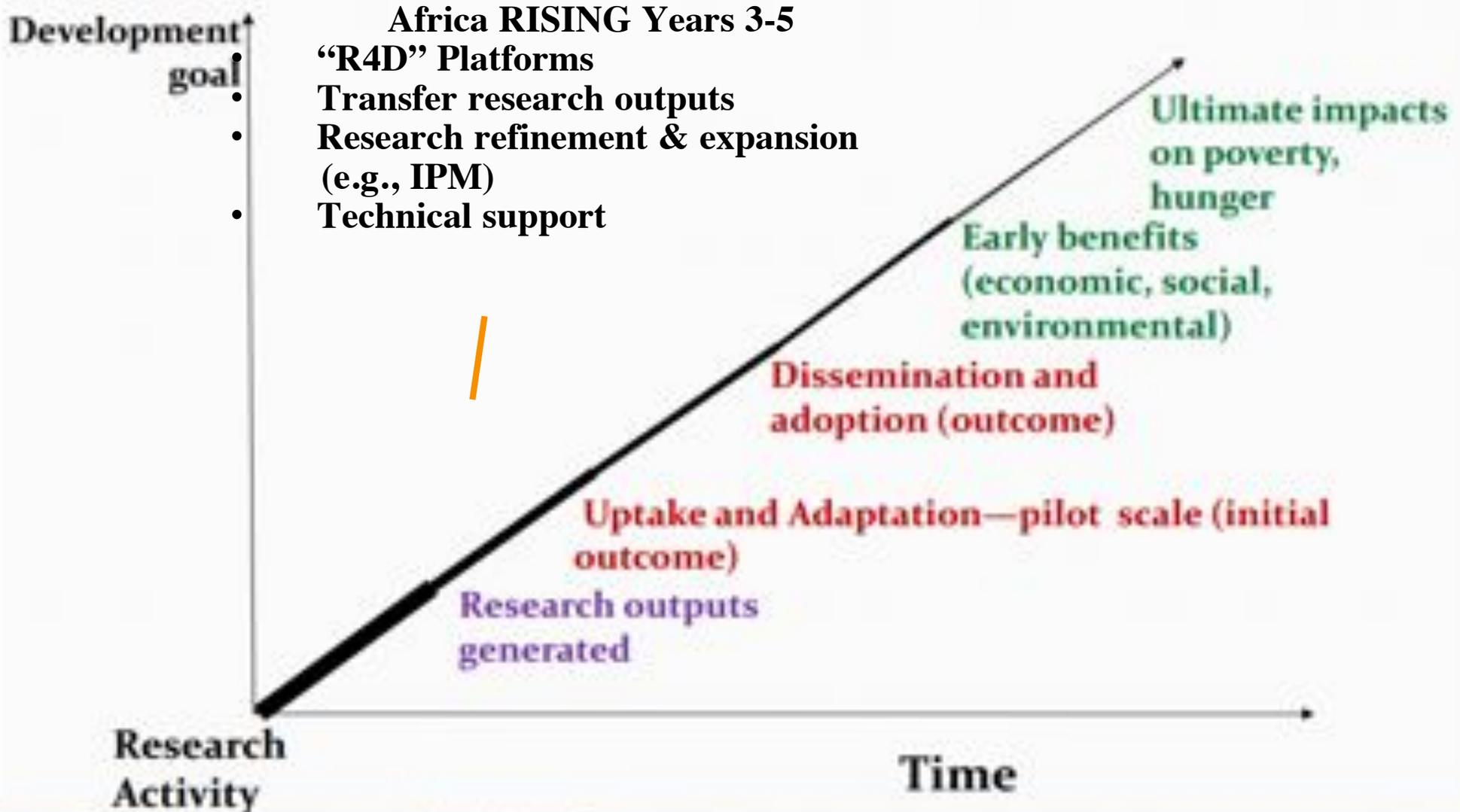
Biochemistry with smallholder farmers in Malawi!



Production of soyabean flour for nutritious soya porridge! (mixture of soya, groundnut and maize)



Research to Impact pathway – On a Time Dimension





Africa RISING Phase I – ends Sept 2016



Africa RISING Phase I – ends Sept 2016

But I think we have made a case for
Phase II



Thank You

Africa Research in Sustainable Intensification for the Next Generation
africa-rising.net



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