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# **Openings Remarks to STAARS Workshop**

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# Agriculture-led structural rural transformation

## Ag technological advances spark farm output growth

- input/labor supply boost to post-harvest processing
- demand boost to rural non-farm economy
- increased investment in human capital
- rural-to-urban migration and fertility rate decline



## Markets an analog/complement to physical techs

- enhanced efficiencies in exchange
- dampens GE price response to tech change



(Some of) Africa in early stages of structural transformation

# Innovation needed b/c traditional producers 'poor but efficient'

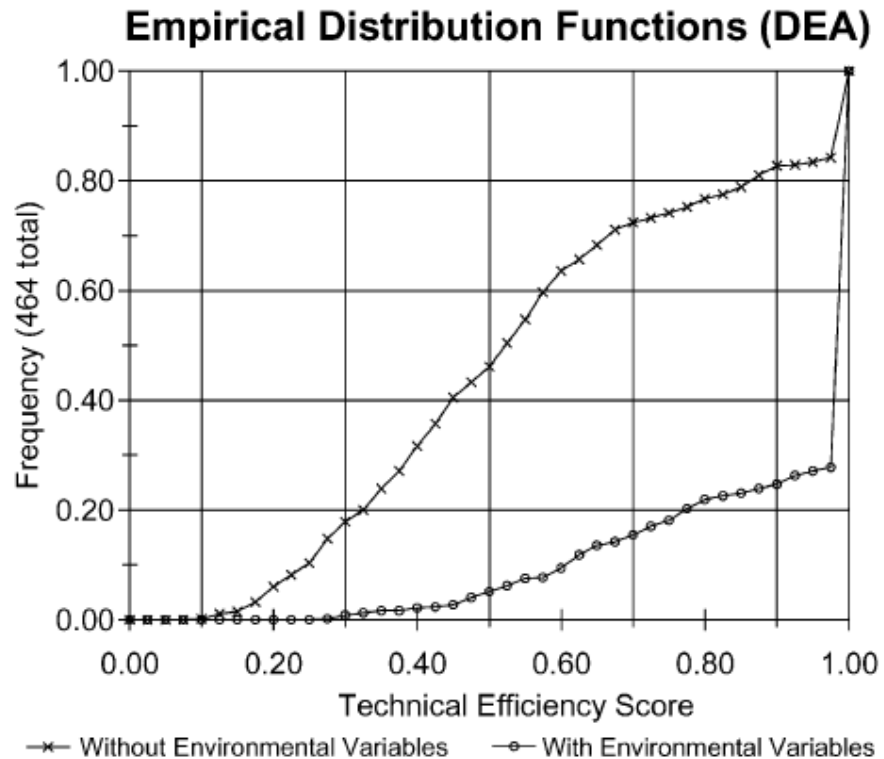


Fig. 2. Distribution functions for estimated plot-specific technical efficiencies.

TW Schultz was right. Observations of smallholder inefficiency often conflate env't variation uncontrollable by farmer w/error.

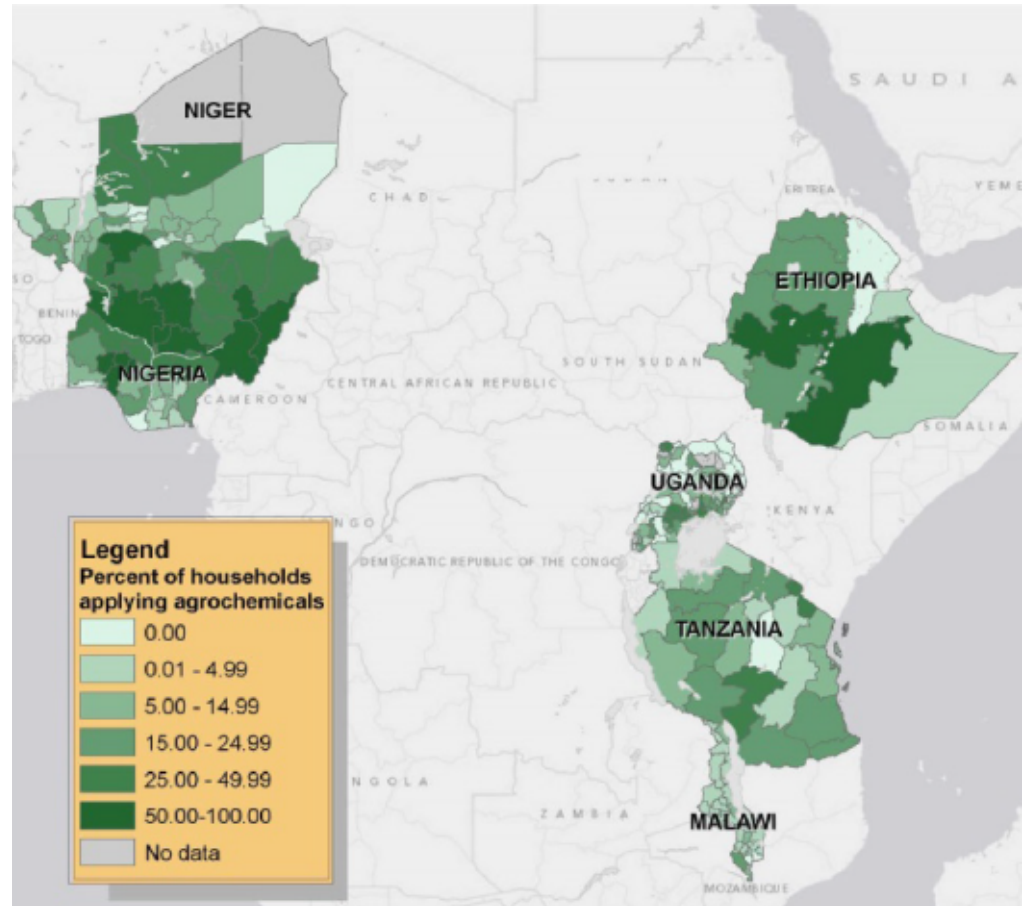
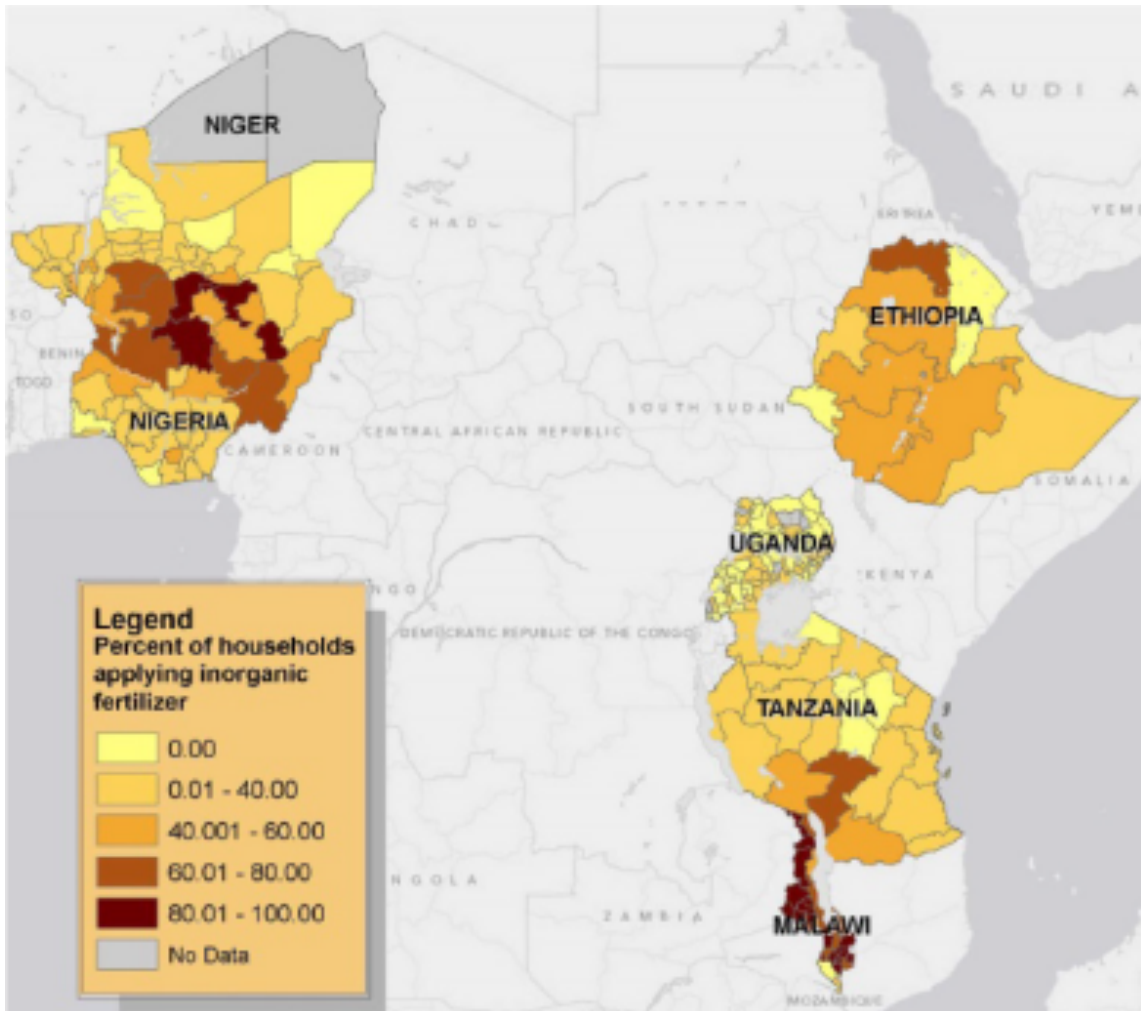
Ex: Ivorien rice farmers – median falls on PPF w/ control for soils, rain, pests, etc. vs. 52% w/o (Sherlund, Barrett & Adesina *JDE* 2002)

Smallholders appear poor but efficient.

Need markets, policies and technologies that make productivity gains feasible/profitable

# Heterogeneous uptake of ag innovations

LSMS-ISA data show that uptake of modern ag inputs varies markedly, w/n and among countries. (Sheahan & Barrett, *FP* 2017)



# Enhancing lives and human capital

Innovations lead to investment in rural education, nutrition, health care. Break intergenerational cycles of poverty.

Greater financial liquidity and ability to cope with shocks w/o compromising future. Enhance resilience; reduce poverty traps.

Reduced risk of conflict, the ultimate destroyer of livelihoods and lives.



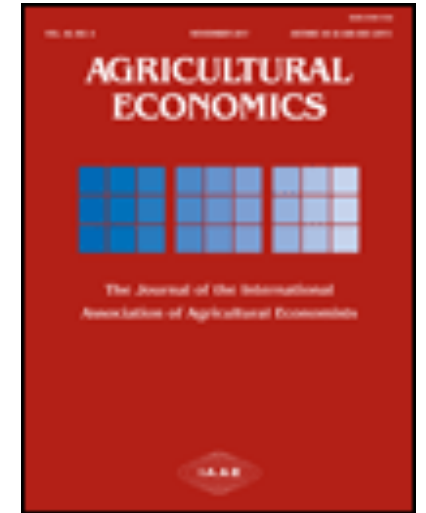
# The STAARS Agenda

## Promote rigorous policy-relevant research

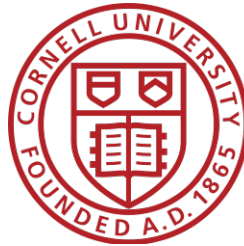
- strong microfoundations using best available data
- engage implementers/policymakers to guide and use research

## Mentor/connect young African policy researchers

- connectivity makes virtual aggregation possible
- need for attention to local policy/research needs



# The STAARS Consortium



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# Rural Africa is on the move. Thank you for your engagement with STAARS!

