The Country Level Soil Health Consortia

James Mutegi[1], Shamie Zingore[1], Rebbie Harawa[2] & Bashir Jama[2]

[1]IPNI-Africa Program, [2]AGRA-Soil Health Program

Overview of IPNI

Better Crops, Better Environment …

…through Science & knowledge management

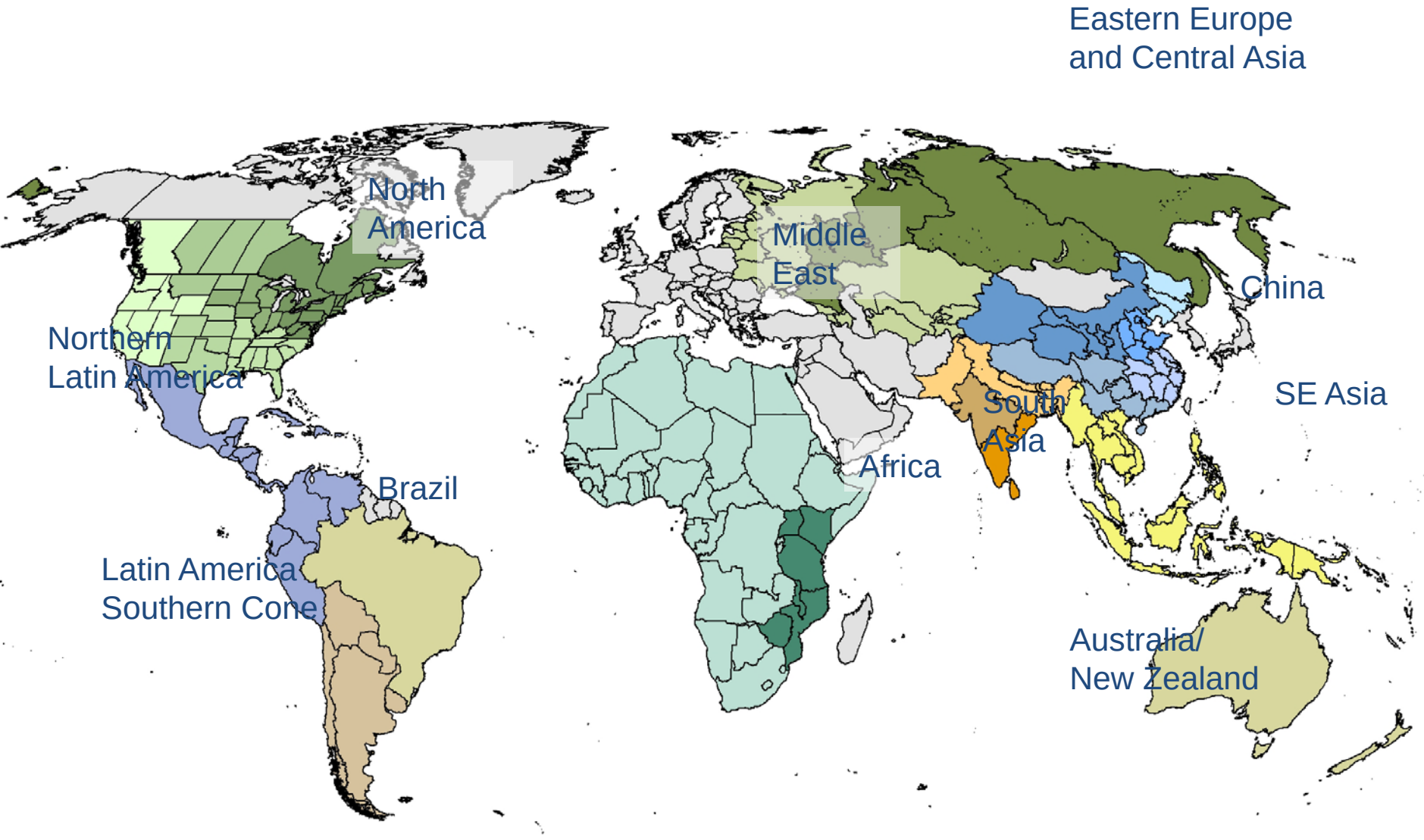
IPNI Strategic Plan

Mission Statement: *The mission of IPNI is to develop and promote scientific information about the responsible management of plant nutrition for the benefit of the human family.*

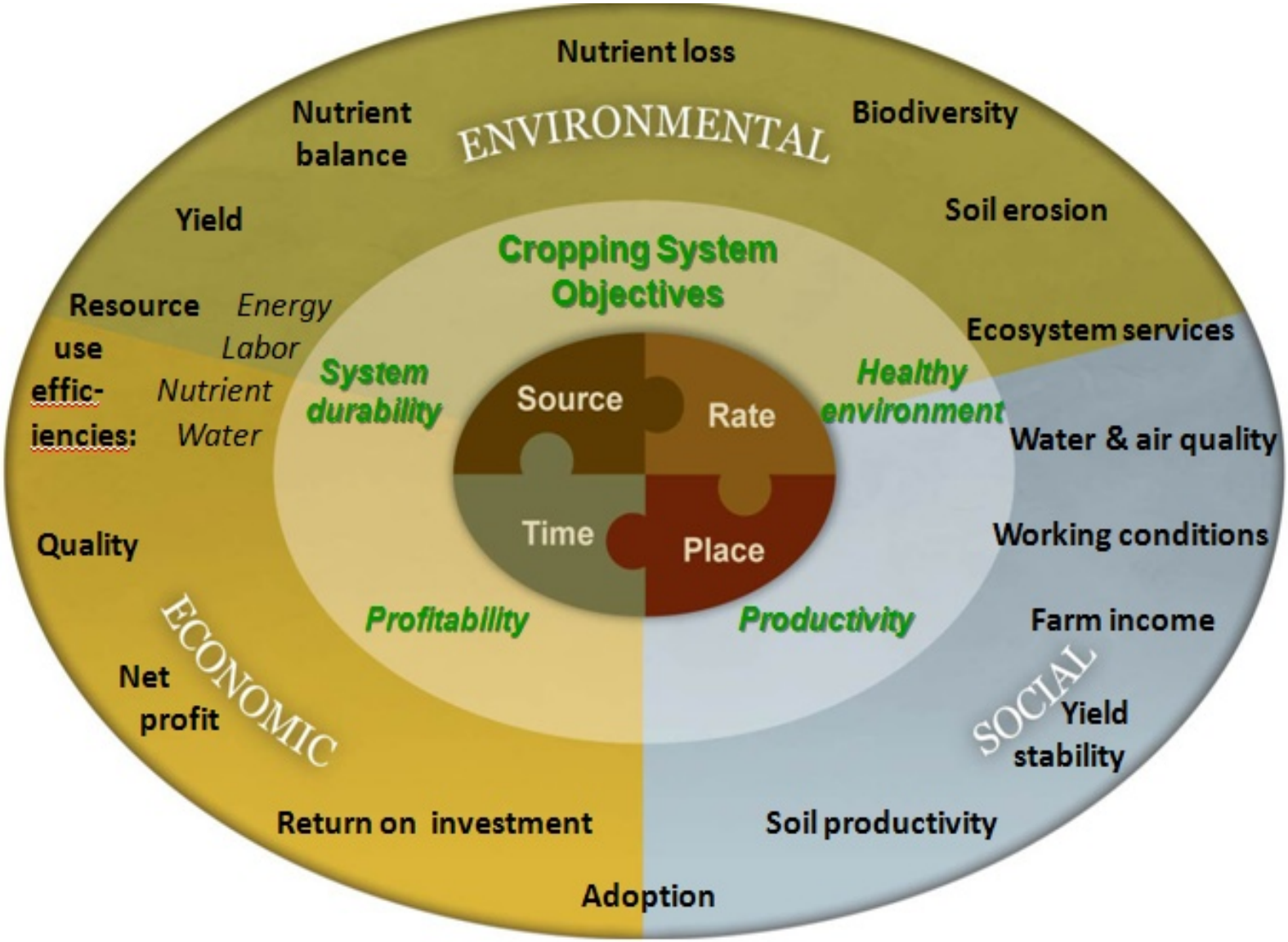
Goals

Provide collaborative leadership development on global plant nutrition issues.	*Facilitate research on environmentally responsible use of plant nutrients needed for agriculture to meet future global demand for food, feed, fiber, and fuel.*	*Provide science-based plant nutrient and fertilizer use information to industry, farmers, agricultural and environmental leaders, scientists, and public policy-makers.*	*Fulfill member needs that align with IPNI goals and resources.*
Leadership & Collaboration	Research	Education	Fertilizer Industry Support

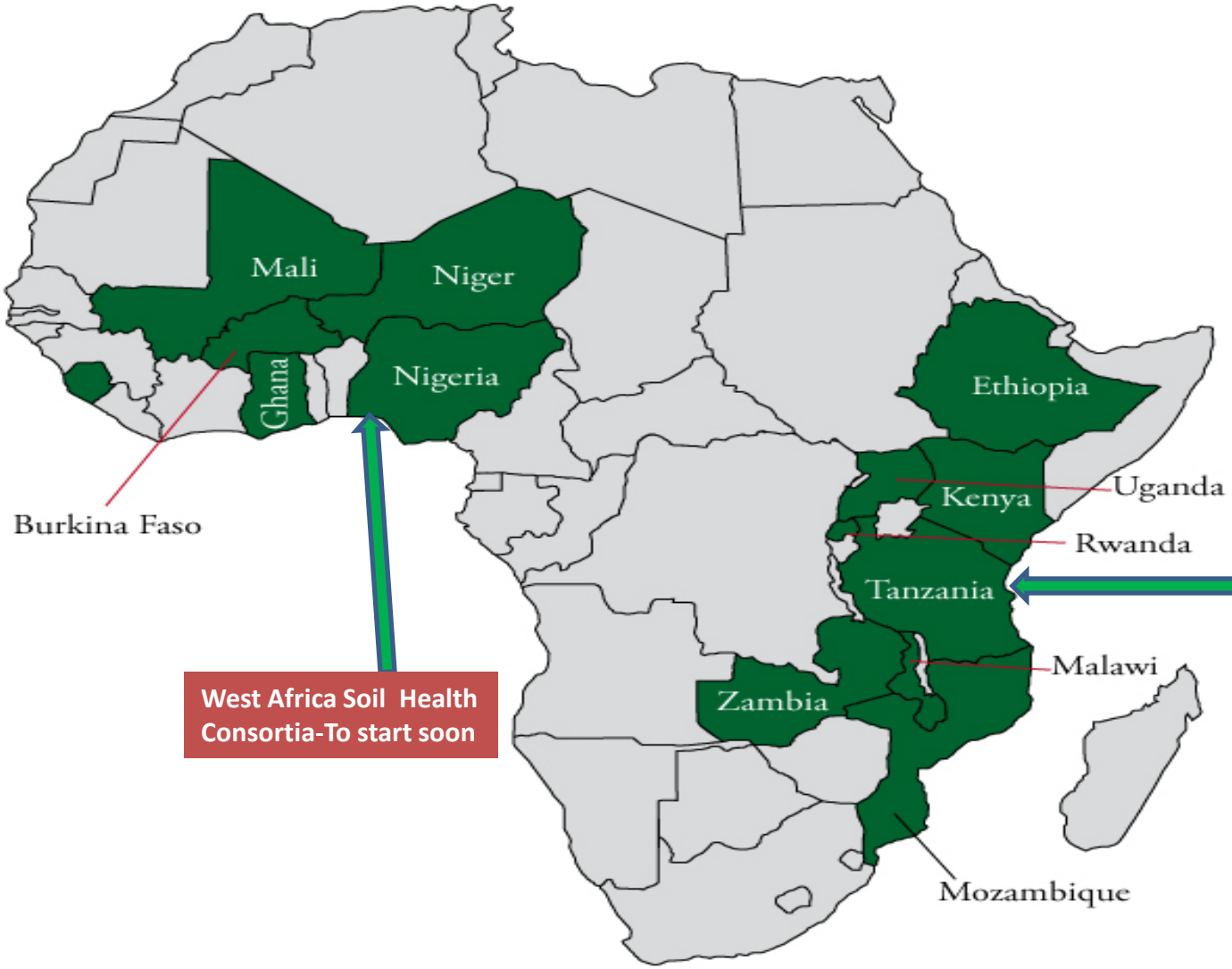
IPNI Current Programs



4R Nutrient stewardship framework



Consortia mandate region



West Africa Soil Health Consortia-To start soon

ESA Consortia mandate region

Why consortia

- Lot of success stories of ISFM have been reported
- Institutions that have reported successes include: AGRA, IFDC, NARS, CIAT, IITA, ICRAF, IPNI, Universities etc
- Limited sharing and comparison of knowledge
- Generated knowledge has therefore not translated into widespread increase in crop yields

Reasons: Farmers are not adopting ISFM,

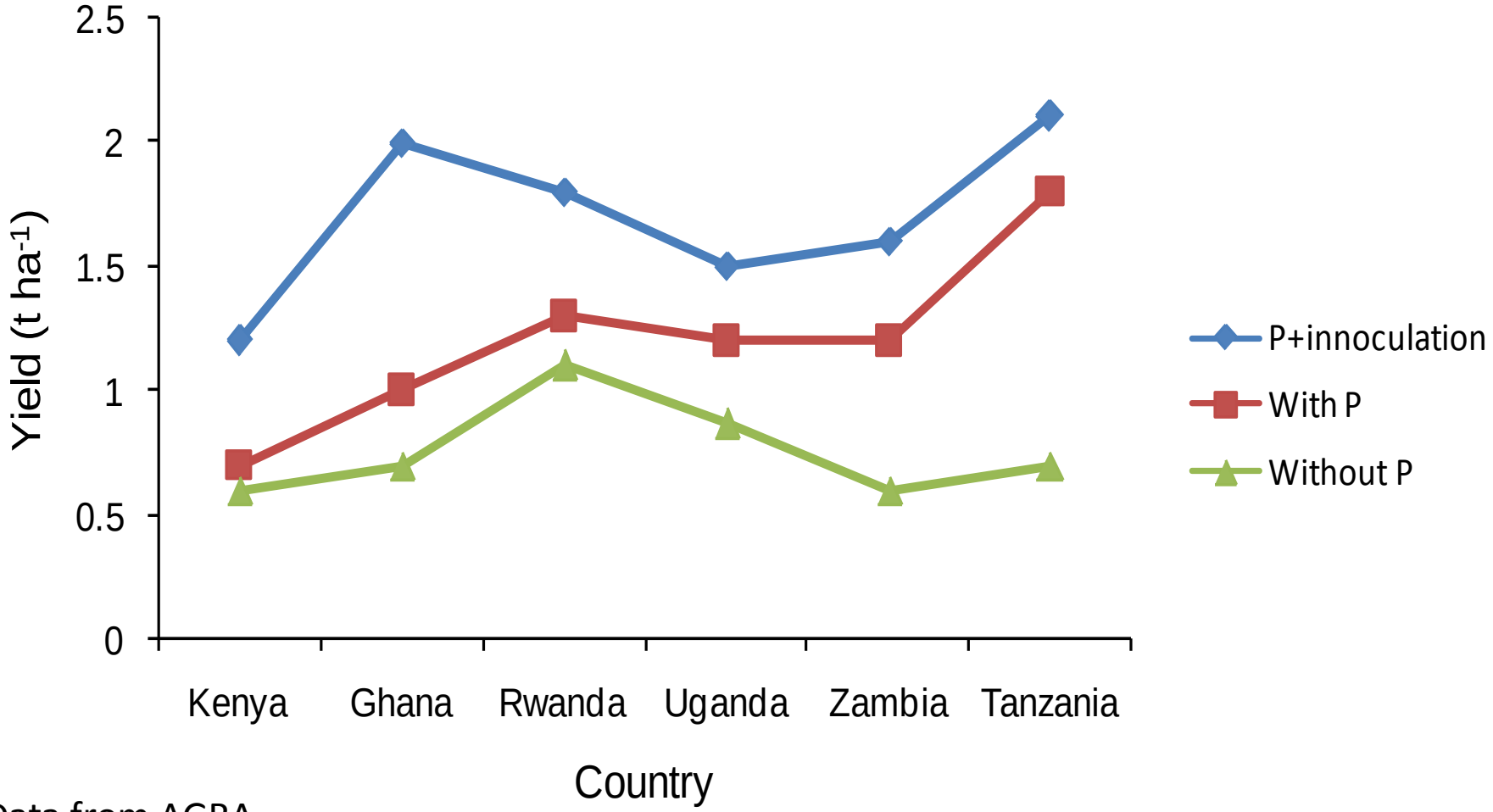
-Policy makers do not know ISFM

-Scientists are not in agreement

Putting success stories into Perspective

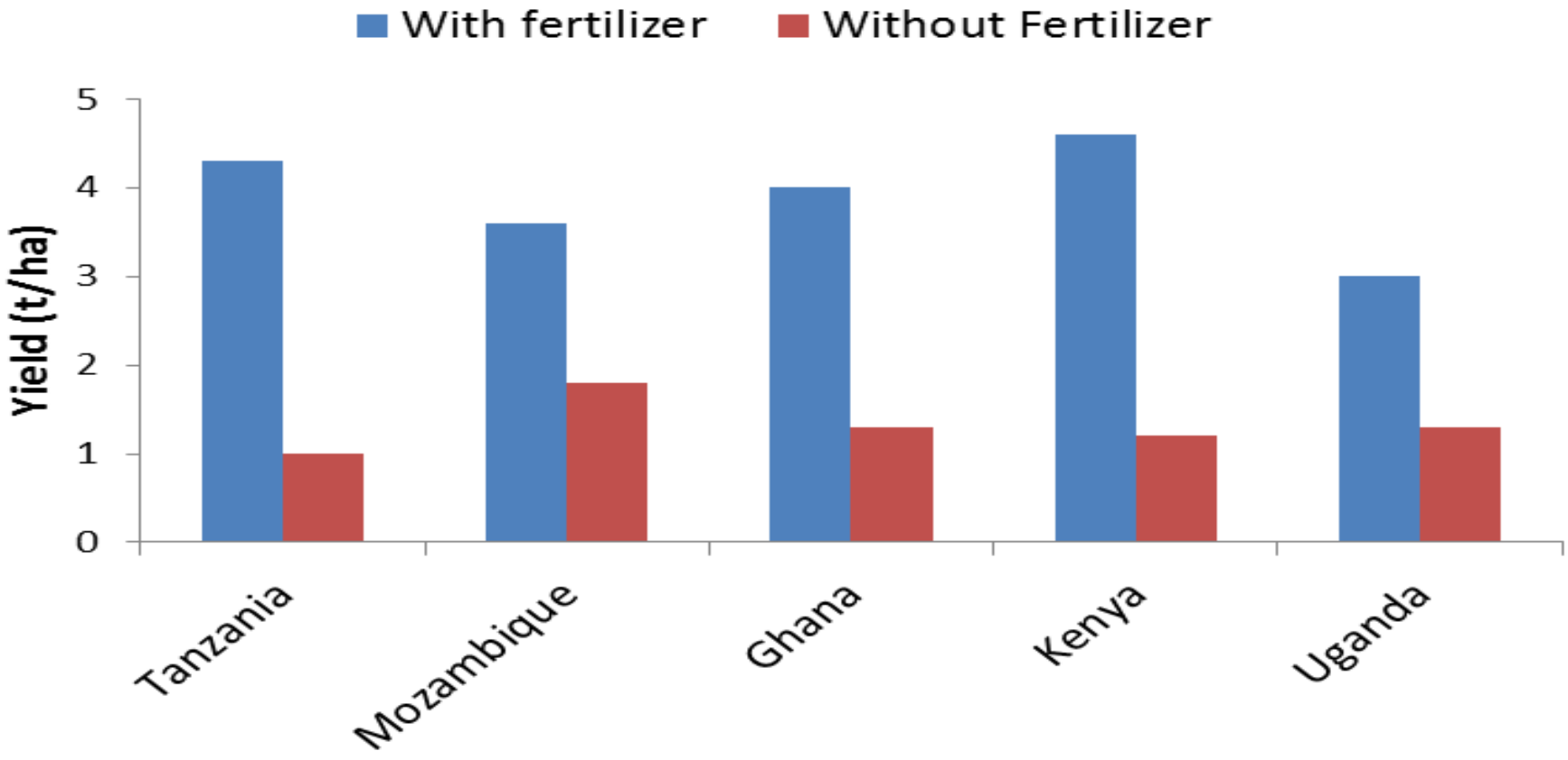
Crop response to ISFM in Central Kenya

Doubling and Tripling Soybean yields with ISFM in 6 African countries



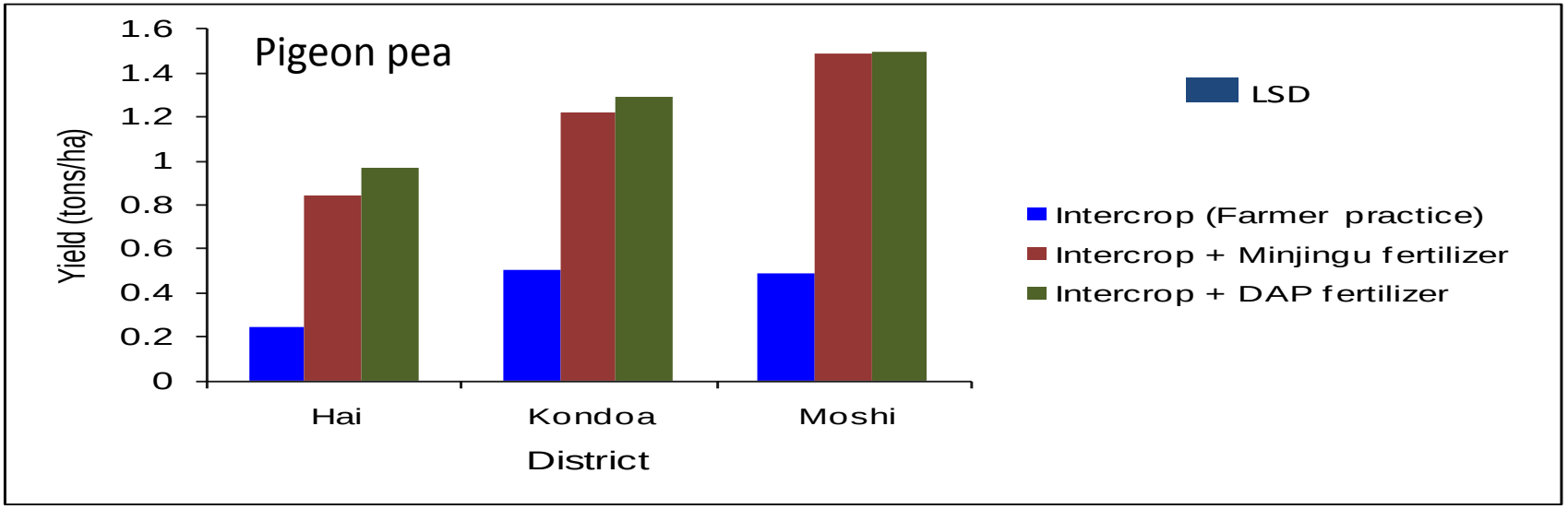
Data from AGRA

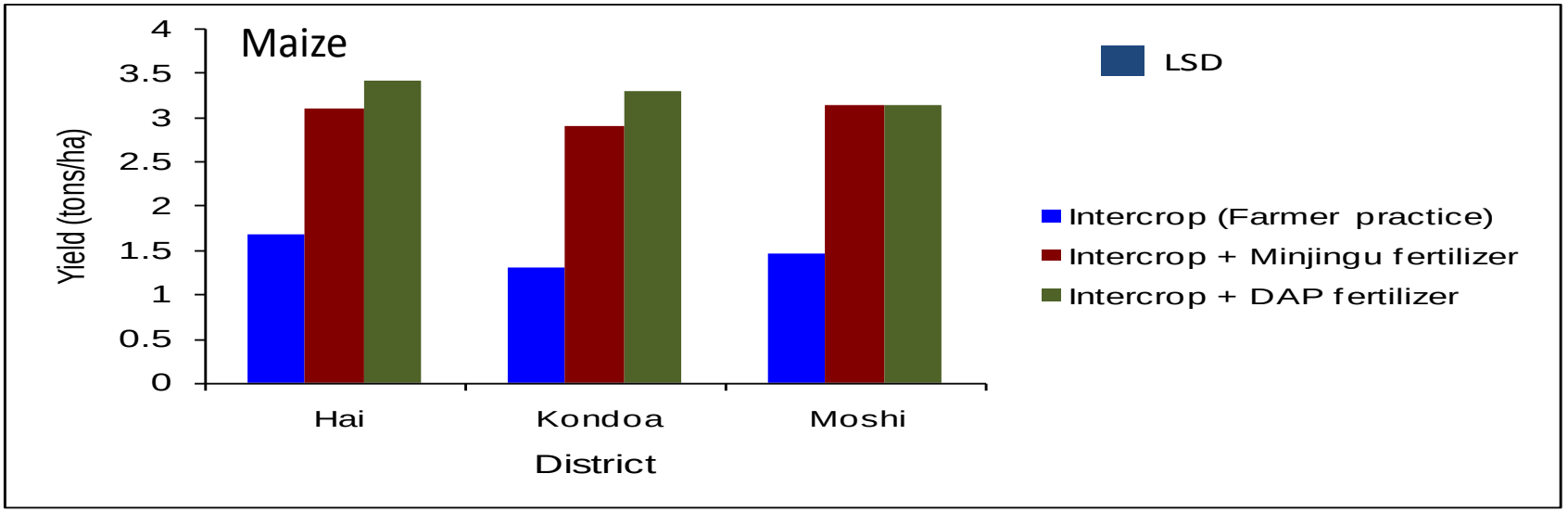
Doubling and Tripling Maize Yield in Eastern, Southern and Western Africa with ISFM



Data from AGRA grantee data

Fertilizer and Maize-Pigeonpea Intercrop more than doubled Maize and Pigeonpea Yields in N Tanzania





Courtesy of Stephen Lyimo

How About Economic Returns?

- For over 90% of above cases, Net profits were positive and high (US$ 300-1200 ha^{-1} per season)
- Benefit-cost ratio of more than 2 implying that the returns on investments were attractive
- Solutions can be achieved with ISFM but bringing ISFM adoption to scale has remained a challenge
- That is the key mandate of country level soil health consortia

Reasons for low uptake of ISFM

- Lack of harmony of message across institutions, poor communication to farmers , policy makers and extension services
- Farmers may not be able to access resources that are required for successful ISFM interventions
- ISFM that works for one region may be a total failure in another region
- Blanket recommendations are therefore in appropriate

Consortia brings together various stakeholders to:

- To evaluate existing data together,
- Pin down on what works where
- Develop effective communication tools on ISFM

- 8 countries are involved: Kenya, Uganda, Tanzania, Rwanda, Ethiopia, Mozambique, Malawi and Zambia
- Each country has brought together, Multi displinary, Multi institutional ISFM stakeholders

Objectives of country consortium

- To pull together ISFM data/knowledge and harmonize it in a way that reveals most appropriate ISFM technologies
- Create a one stop shop country ISFM dbase
- Develop targeted communication tools, e.g policy briefs for policy makers, extension manuals for farmers

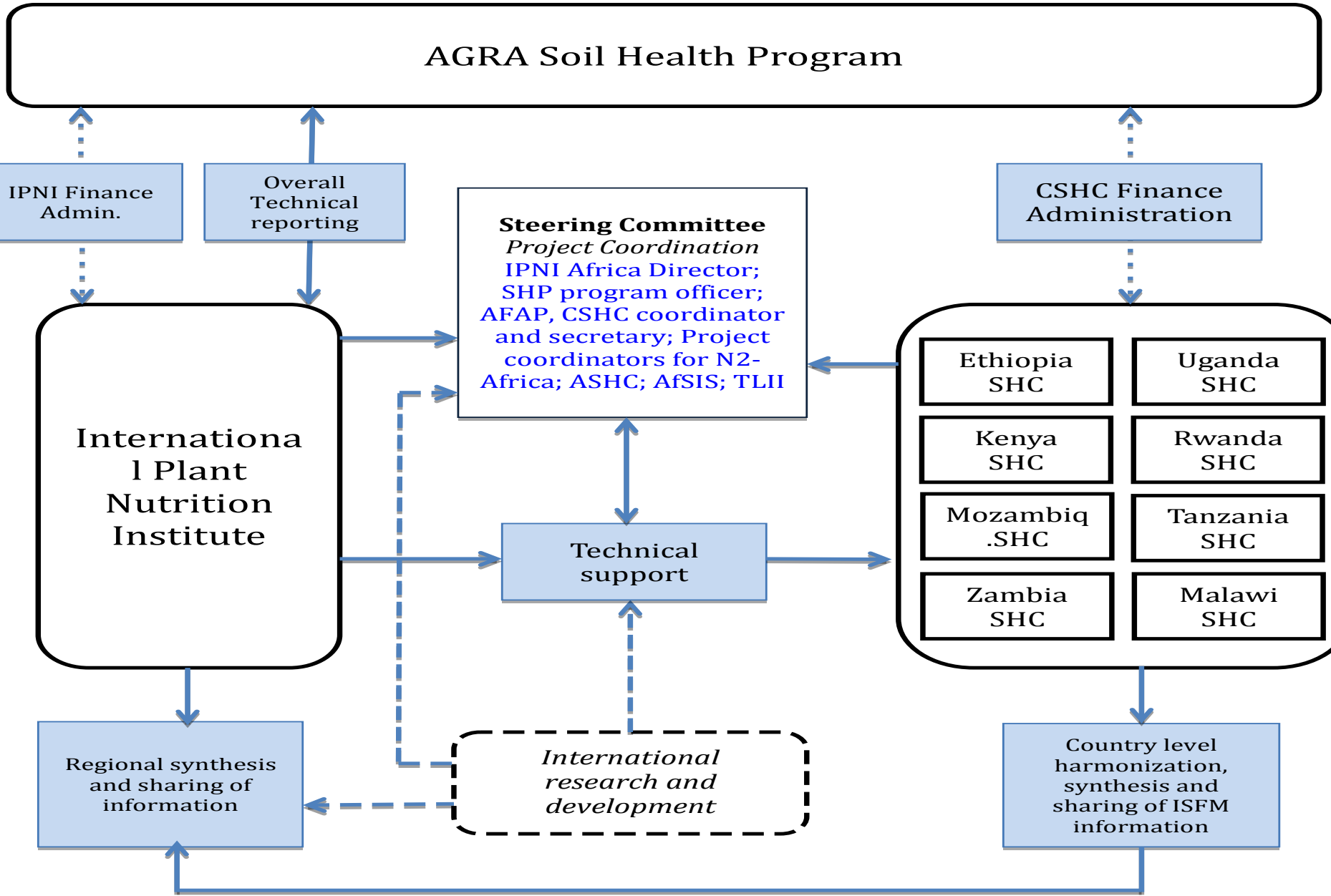
IPNI and Mozambique Soil Health Consortia

- Collaboration & Technical Backstopping on
  - Baseline surveys and data interpretation
  - Data analysis-Social, Statistical, Spatial, Meta-analysis
  - Support website development and management
  - Development of ISFM communication tools (policy, extension and training etc)
  - Link KSHC to regional ISFM knowledge resources

Regional Approach

- Regional coordination is based at IPNI SSA Office -Nairobi
- IPNI will develop uniform data collection templates for all the 8 countries eg baseline quistionares
- Uniform templates will enable comparisons and recommendations for scaling up across countries
- Each country will have a dbase connected to the regional dbase at IPNI
- The idea is to allow meta-analysis, cross comparison of data by crop, ISFM technology and region

Regional structure of the consortia



Expected outcomes from country consortia

- Agreement on best ISFM technologies at the national level between researchers, extension systems, development programs and policy makers
- Harmonization of efforts to disseminate ISFM technologies at the country level
- Increased crop productivity through improved access and utilization of harmonized information ISFM technologies by farmers

Targeting Information need for various stakeholders

- Farmers- Demonstration bulletins-very simple, photos of how it can be done. Preferably in language that farmer can understand
- Extension-Extension bulletins-A bit more technical details, photos, pictures, graphs and answers to the question why, Easy to use to explain to farmers
- Policy makers- Policy briefs, straight to the point, emphasizing on impacts and success stories. No treatment comparisons and statistics here
- Scientists-More technical, clear demonstration of significant differences and data interpretation, show field scale variability
- Donors-Answer questions on why invest. Success stories etc

IPNI
INTERNATIONAL
PLANT NUTRITION
INSTITUTE

Thanks

AGRA
Growing Africa's Agriculture