The Country Level Soil Health Consortia

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Overview of IPNI

Better Crops, Better Environment …

…through Science & knowledge management

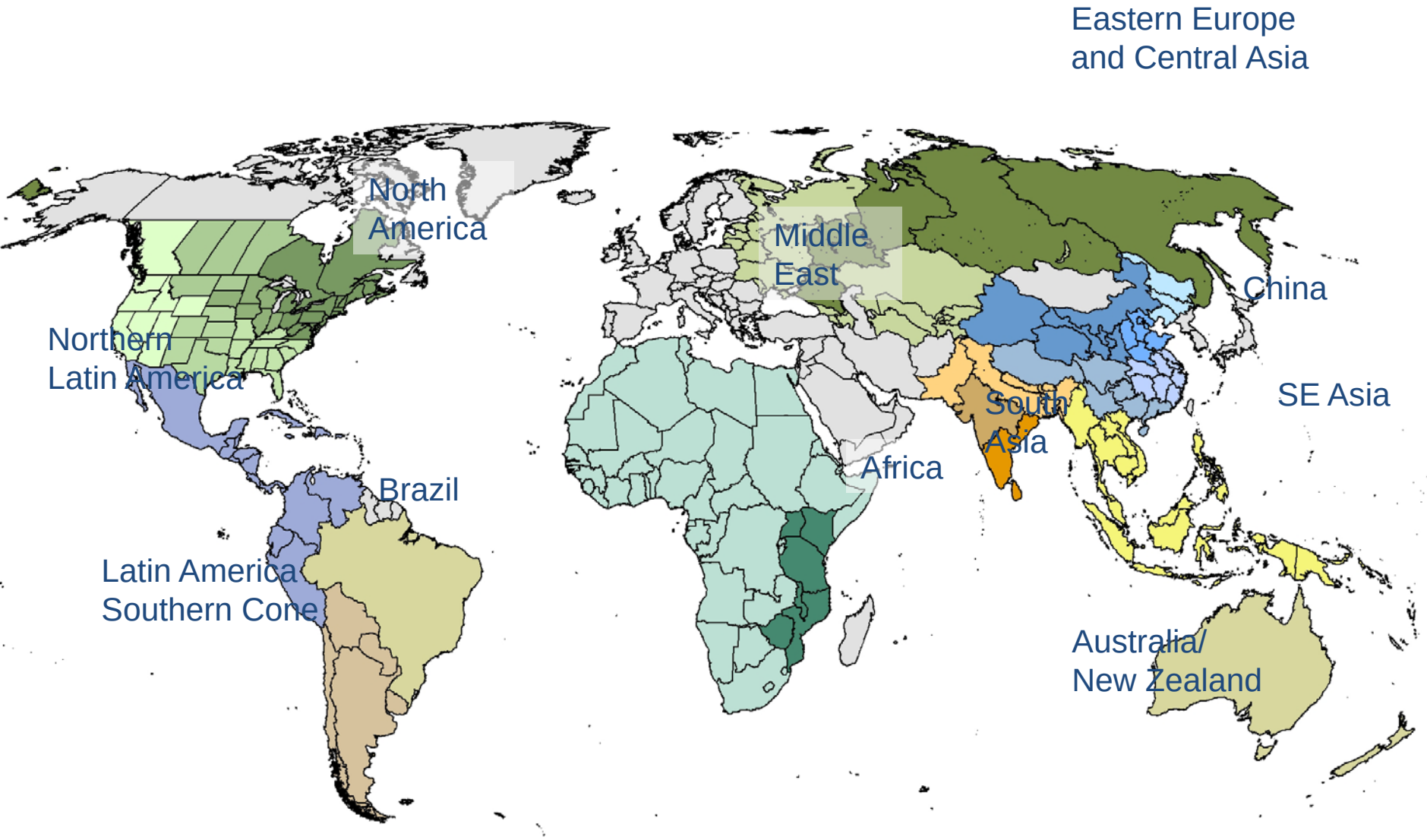
IPNI Strategic Plan

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.*

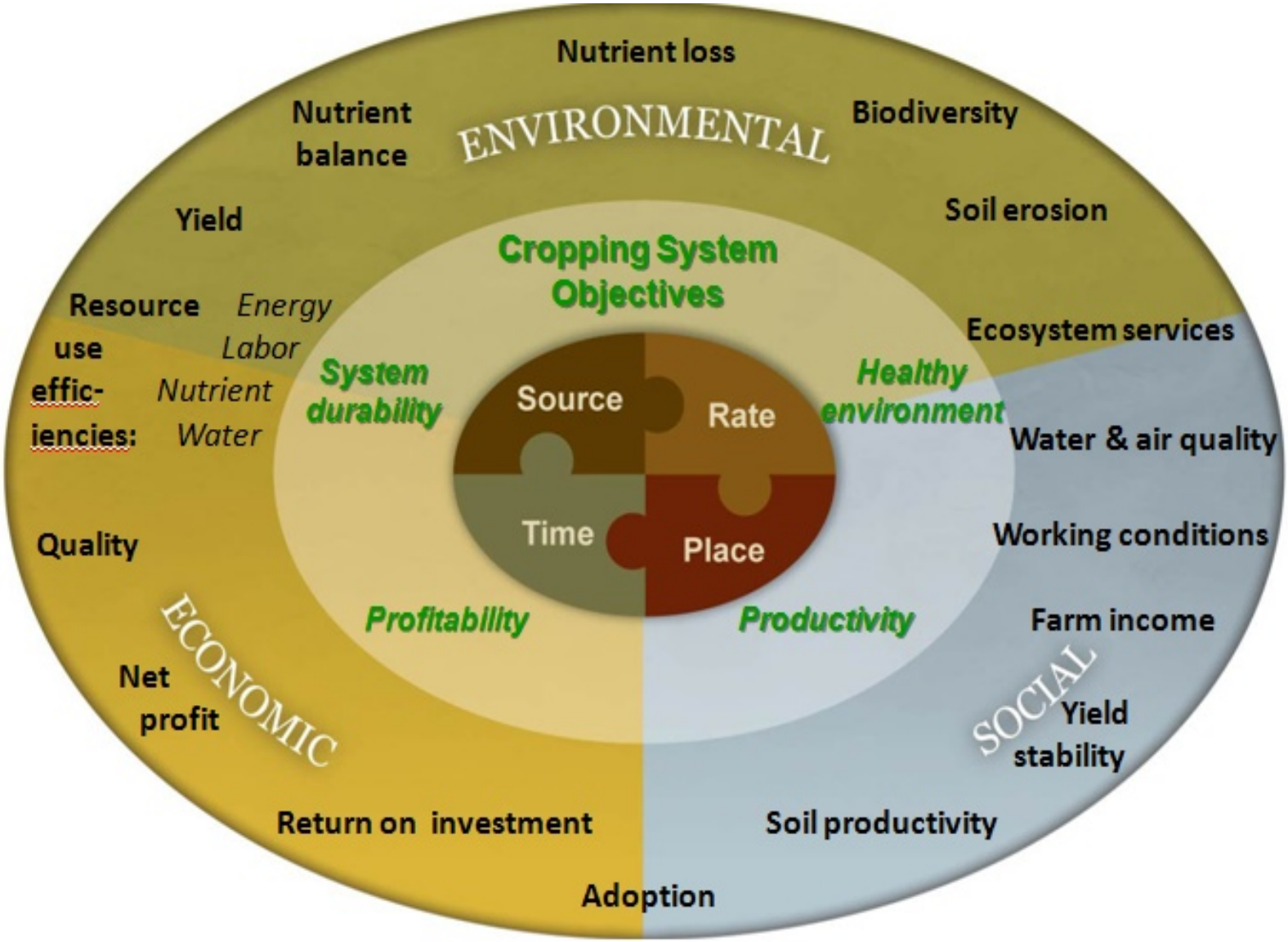
Goals

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**

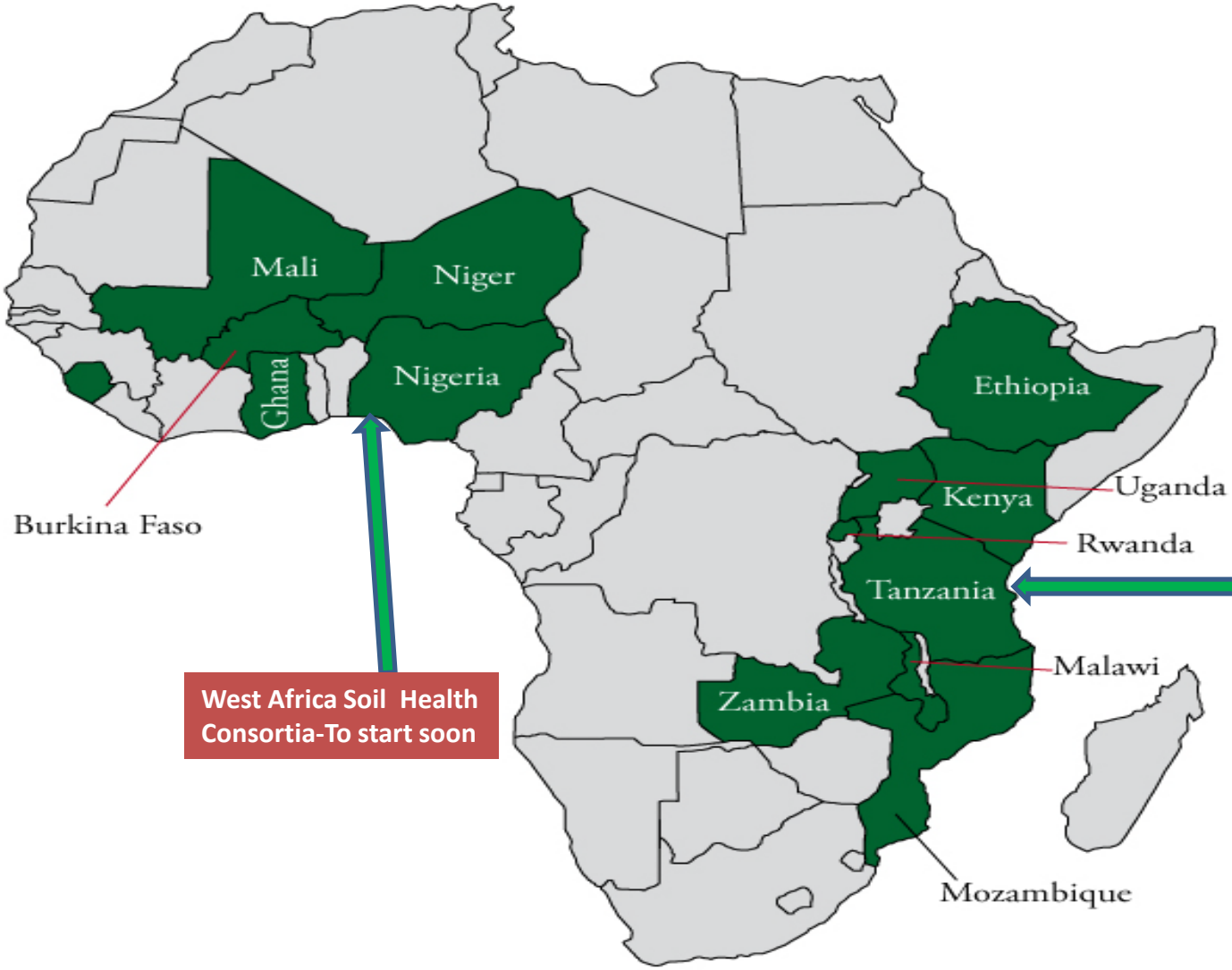
IPNI Current Programs



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

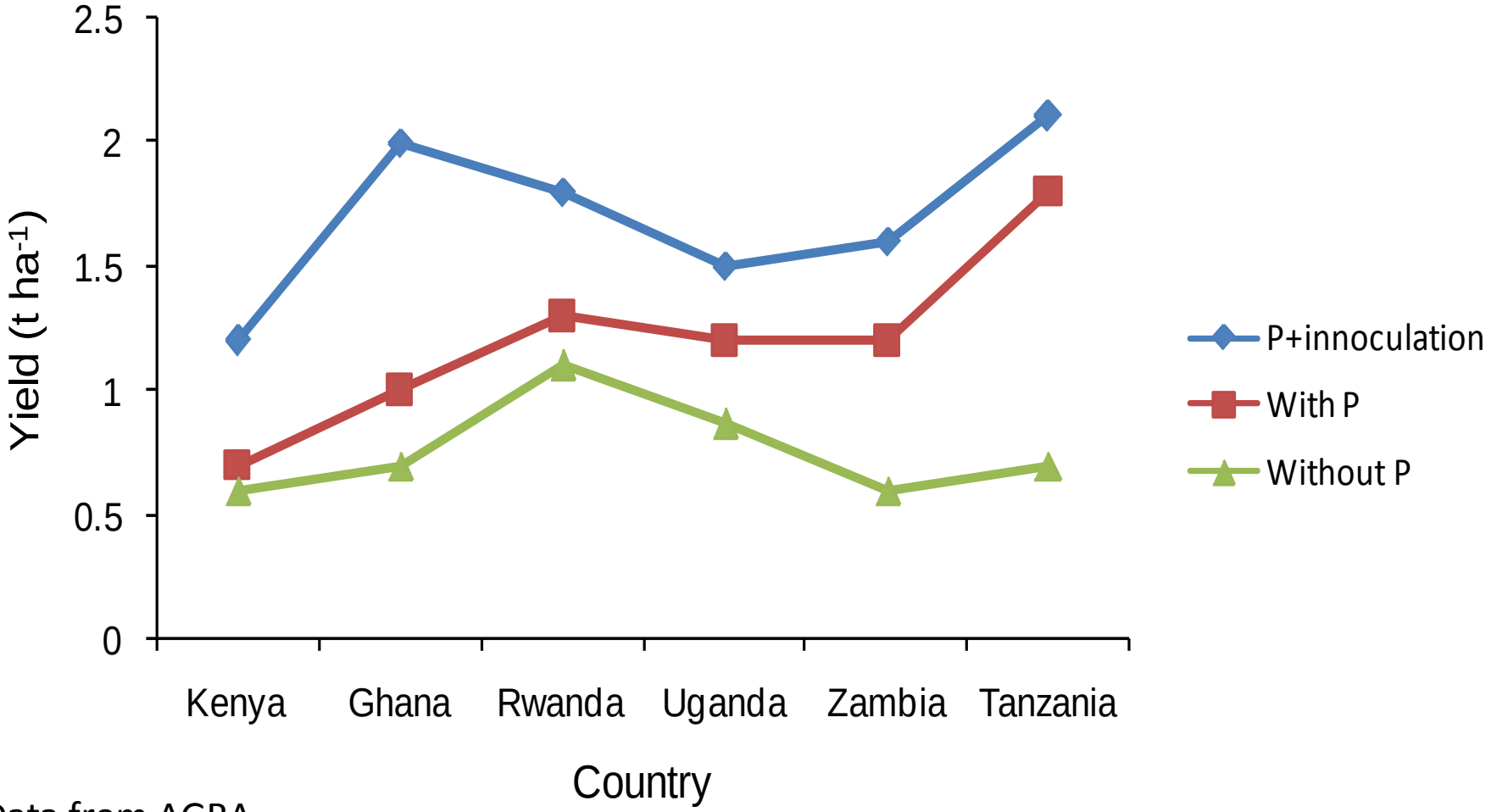
-Scientists are not in agreement

Putting success stories into Perspective

Crop response to ISFM in Central Kenya

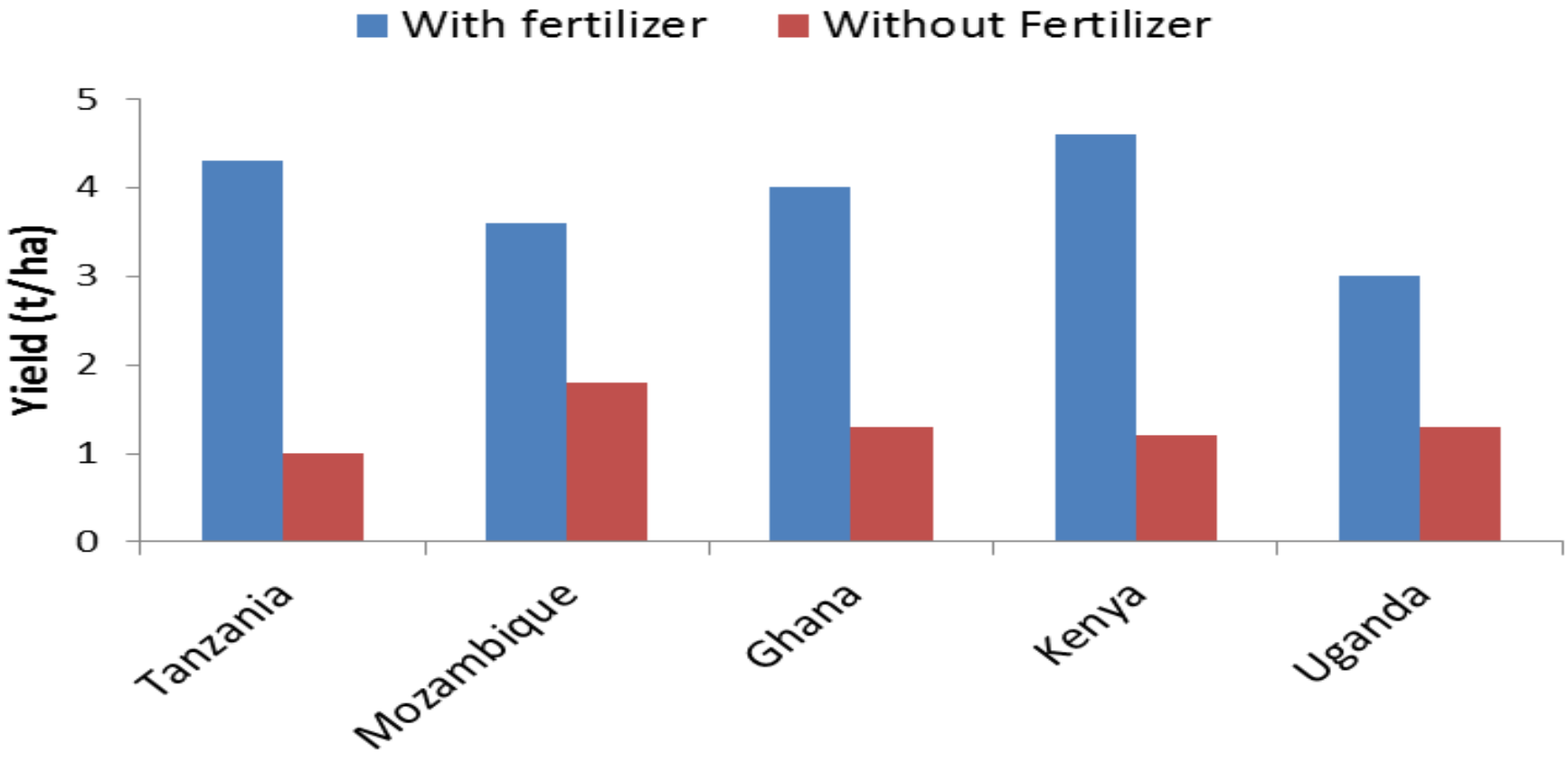
Climbing beans in Kenya, Nerica Rice in Uganda

Doubling and Tripling Soybean yields with ISFM in 6 African countries



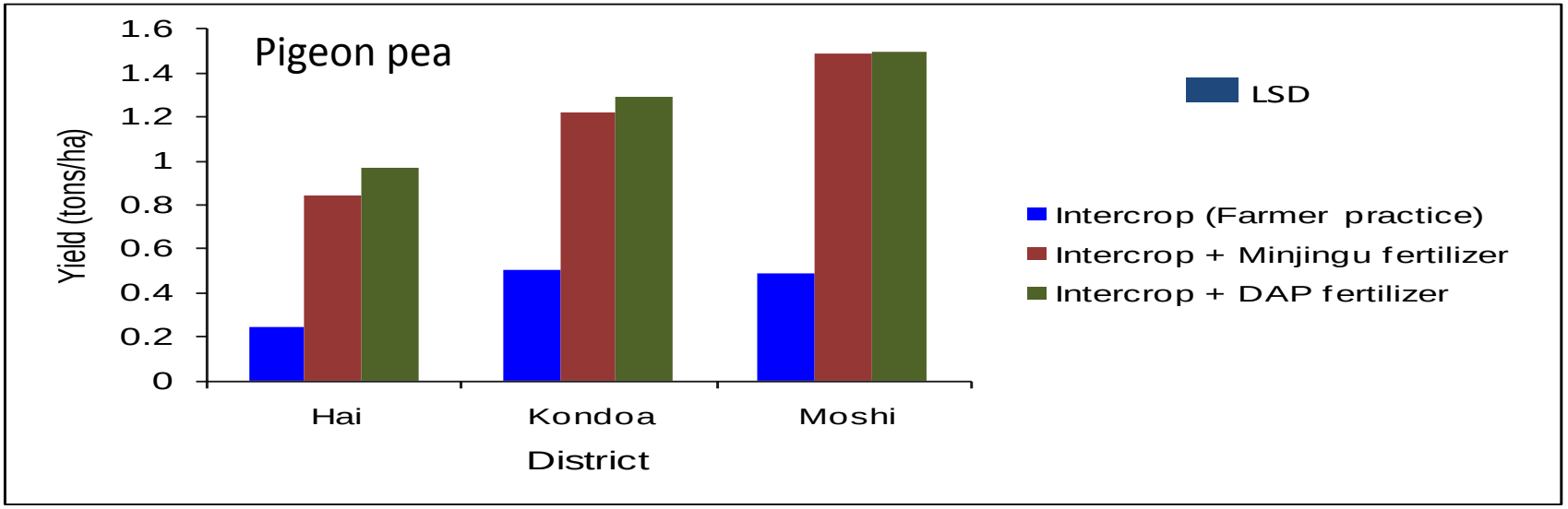
Data from AGRA

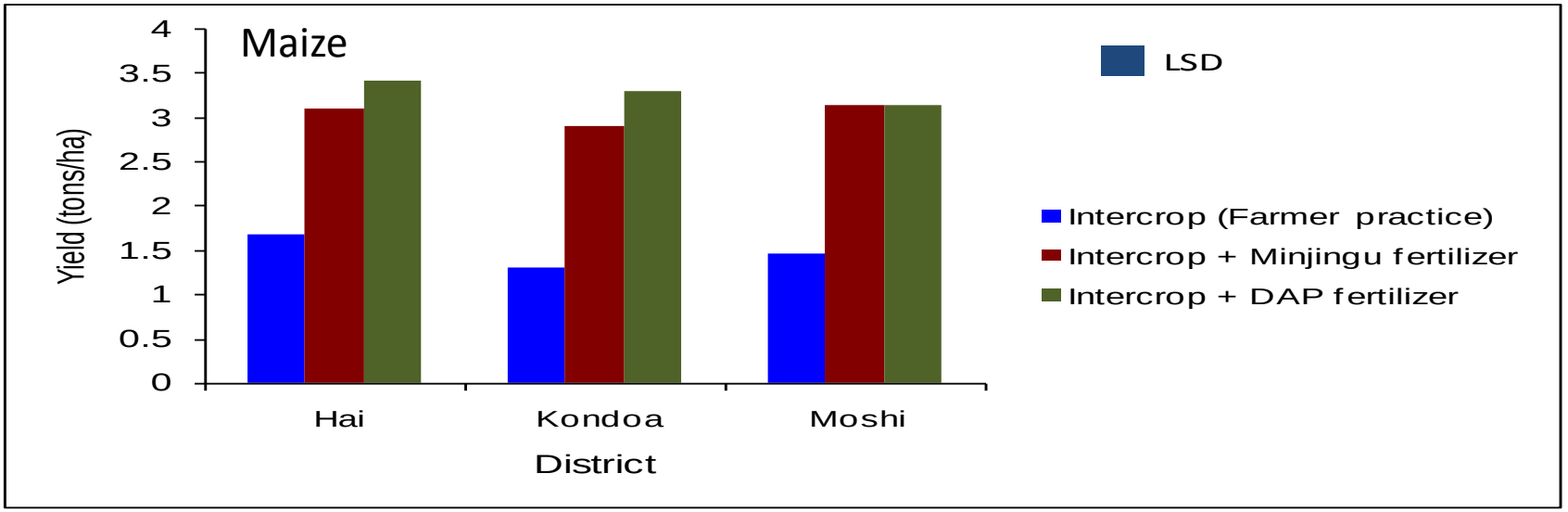
Doubling and Tripling Maize Yield in Eastern, Southern and Western Africa with ISFM



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
- ISFM that works for one region may be a total failure in another region
- Blanket recommendations are therefore in appropriate

Lessons Learnt from Baseline Survey

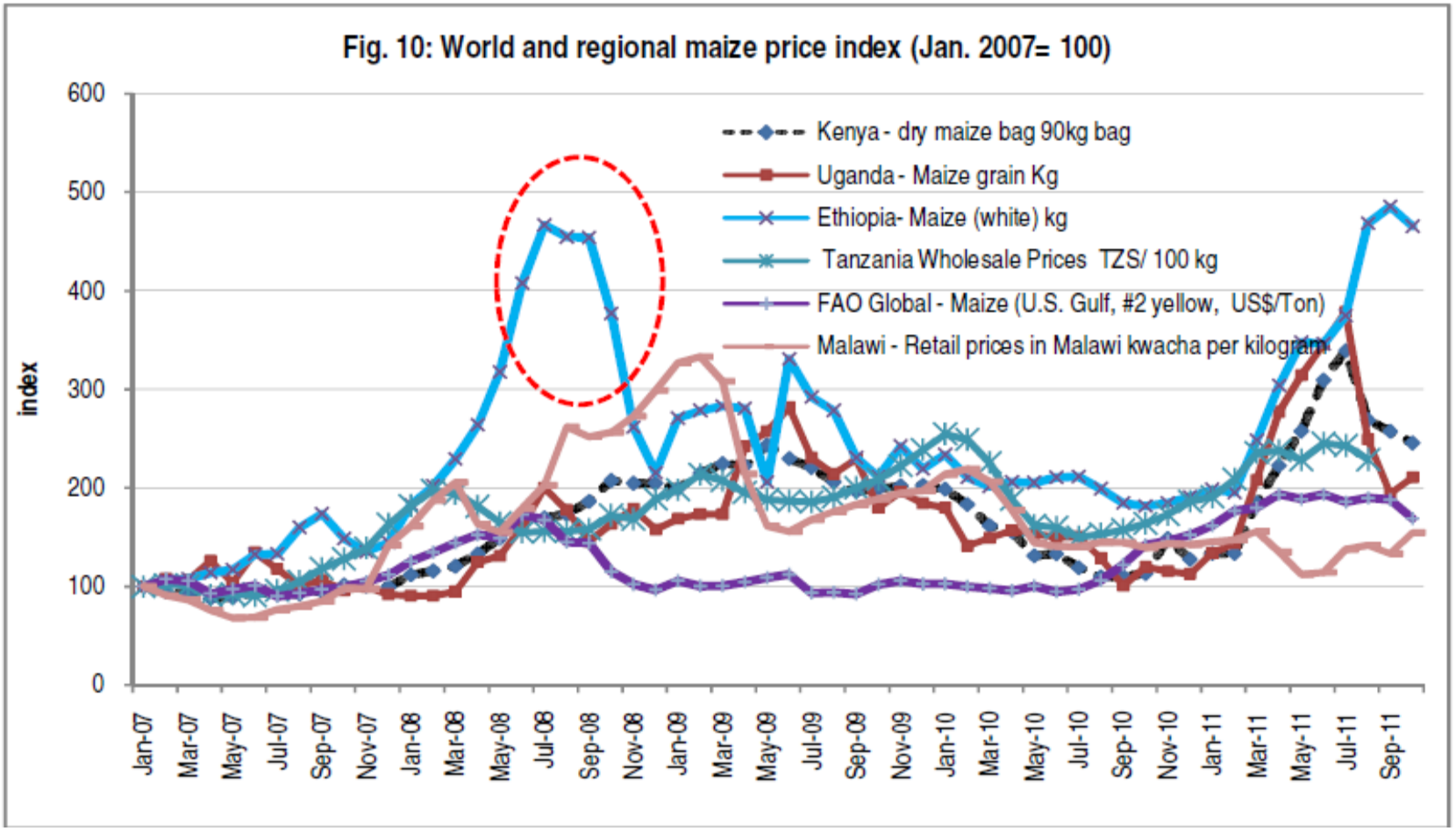
Capacity of country teams to develop ISFM knowledge products

	Malawi	Rwanda	Tanzania	Uganda	Zambia
	……%……				
Posters	74.1	4.2	40	34.8	28
Technical briefs	70.4	8.3	32	30.4	4
Journal articles	51.9	4.2	38	10.9	41
Policy briefs	33.3	4.2	12	10.9	24
Leaflets /booklets	11.1	0	0	0	0
Videos	7.4	8.3	12	10.9	0
Manuals	7.4	0	0	2.2	7
Others	11.1	0	0	0	0

Do stakeholders access balanced ISFM information

Receiving ISFM information	(%) access	Sources
How to use commercial fertilizers	83	Books, journals papers, suppliers, publications, brochures, reports, IPNI, face to face, books, Internet, Skype, posters
How to use organic fertilizers	83	Books, journal papers, NGOs, suppliers, publications, brochures, books, internet, posters
Use of improved crop varieties	83	Input dealers, adverts, seed exhibitions, books, brochures, posters, government extension, journal papers, reports, regional programs, research institutions
How to combine organic, commercial fertilizers and improved crop varieties to improve production	8	Books, research papers, brochures, books, leaflets, fertilizer industries, journals, Tv programs, internet
How to use inoculants	8	N2Africa Podcaster, IITA research bulletins

Need to Solve Prodn Issues in Ethiopia indicated by Price index



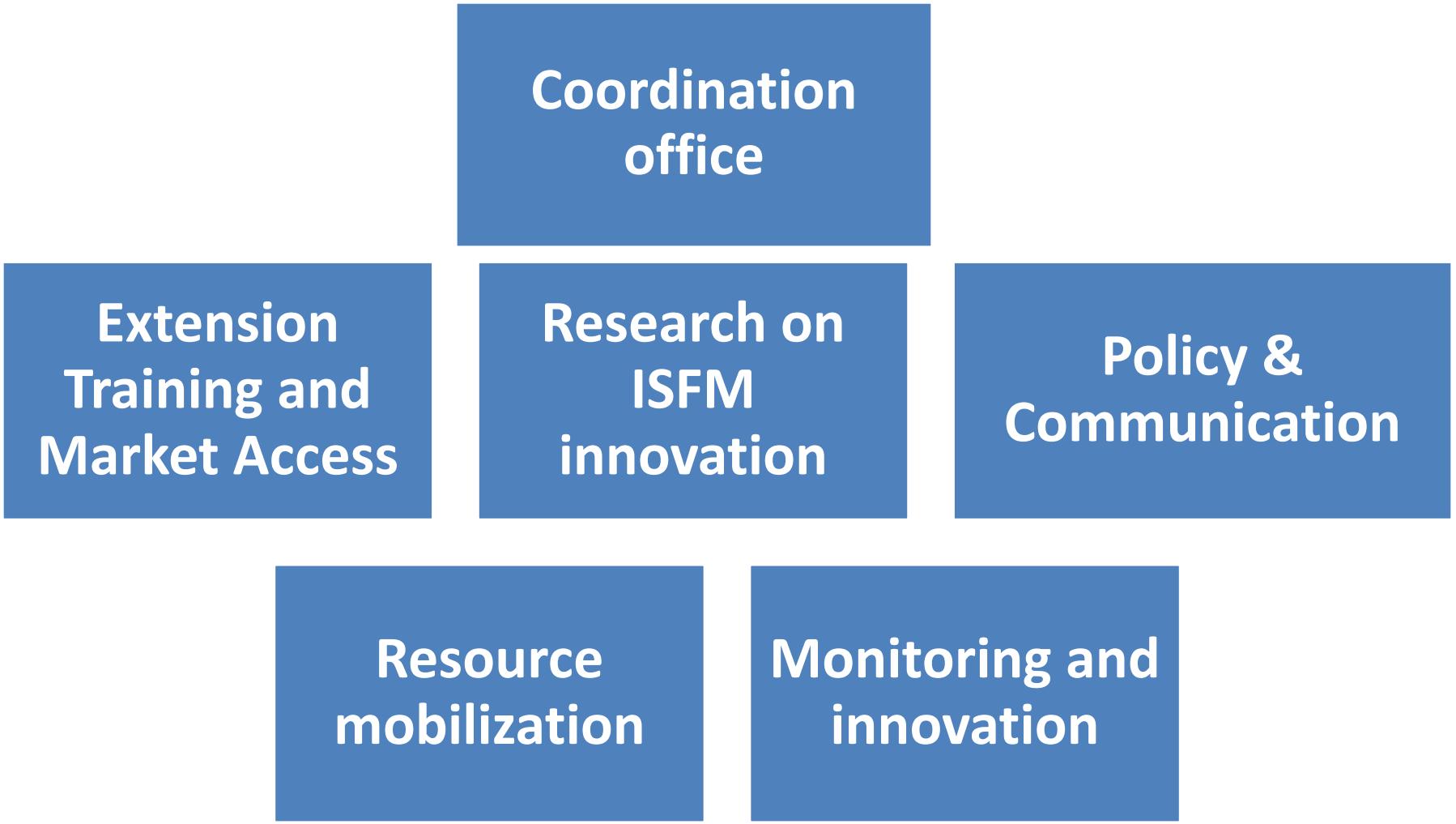
Worako, 2012

Consortia brings together various stakeholders to:

- To evaluate existing data together,
- Pin down on what works where and hence develop site specific recommendations
- Develop effective targeted ISFM communication tools
- Create a one stop shop country ISFM dbase

- Each country has brought together, Multi displinary, Multi institutional ISFM stakeholders
- Country level stakeholders will learn from each other & also learn from other countries within the consortia

Country level project operations



IPNI and Ethiopia Soil Health Consortia

- Collaboration & Technical Backstopping through
  - Support in baseline surveys, data analysis and interpretation
  - Support in database development
  - Support ESHC in development of ISFM communication tools (policy briefs, extension, posters, technical reports etc)
  - Link ESHC to regional ISFM knowledge resources
  - IPNI will provide this support through training, advise and development of templates (cooperation and teamwork is crucial)

Regional Approach

- Regional coordination is based at IPNI SSA Office -Nairobi
- IPNI will develop uniform data collection templates for all the 8 countries e.g baseline questionnaires
- 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

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 ISFM messages
- One stop shop ISFM database-easy to access
- Stakeholders who are knowledgeable on data analysis and devpt of communication tools
- Ultimately improved crop yields, food security and household incomes due to access of balanced ISFM information by farmers and policy makers

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
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Thanks

AGRA
Growing Africa's Agriculture