



FEED THE FUTURE

The U.S. Government's Global Hunger and Food Security Initiative

Feed the Future Program for Sustainable Intensification

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USAID

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Feed the Future Food Security Innovation Center:

Leads USAID's implementation of FTF Research Strategy in seven priority program areas

- Sustainable Intensification
- Climate Resilient Cereals
- Legume Productivity
- Advanced Approaches to Combat Pests and Disease
- Safe and Nutritious Foods
- Policy and Markets Research and Support
- Human and Institutional Capacity Development



<http://feedthefuture.gov/research>

- Integrate research outputs, policy and nutrition in production systems
- Focus multiple interventions within targeted geographic areas
- Diversify major production systems with improved crops and animals
- Evaluate and disseminate improved soil and water management practices



Purpose: Provide pathways out of hunger and poverty for small holder families, particularly for women and children, through sustainably intensified farming systems.

	Lead Institution
Cereal Systems Initiative for South Asia	CIMMYT
Africa RISING	ILRI/IITA/IFPRI
FTF Innovation Lab for Small-scale Irrigation	Texas A & M
Integrated Pest Management FTF Innovation Lab	Virginia Tech
IPM Innovation Lab AFSI Associate Award	Virginia Tech
SANREM FTF Innovation Lab	Virginia Tech
Water and Livelihoods Initiative	ICARDA
CGIAR – Aquatic Agricultural Systems	WorldFish
FTF Innovation Lab for Sustainable Intensification	???



Inputs

INDIRECT:

- Financial capital
- Knowledge
- Infrastructure
- Technology
- Markets

DIRECT:

- Labour
- Water
- Inorganic chemicals and/or organic matter
- Biodiversity

SUSTAINABILITY MEASURES

- Same or less land and water
- Efficient, prudent use of inputs
- Minimised GHG emissions
- Increased natural capital
- Strengthened resilience
- Reduced environmental impact

INTENSIFICATION PROCESS

- Ecological
- Genetic
- Socio-economic

FARMER & COMMUNITY



Outputs

Production Income Nutrition



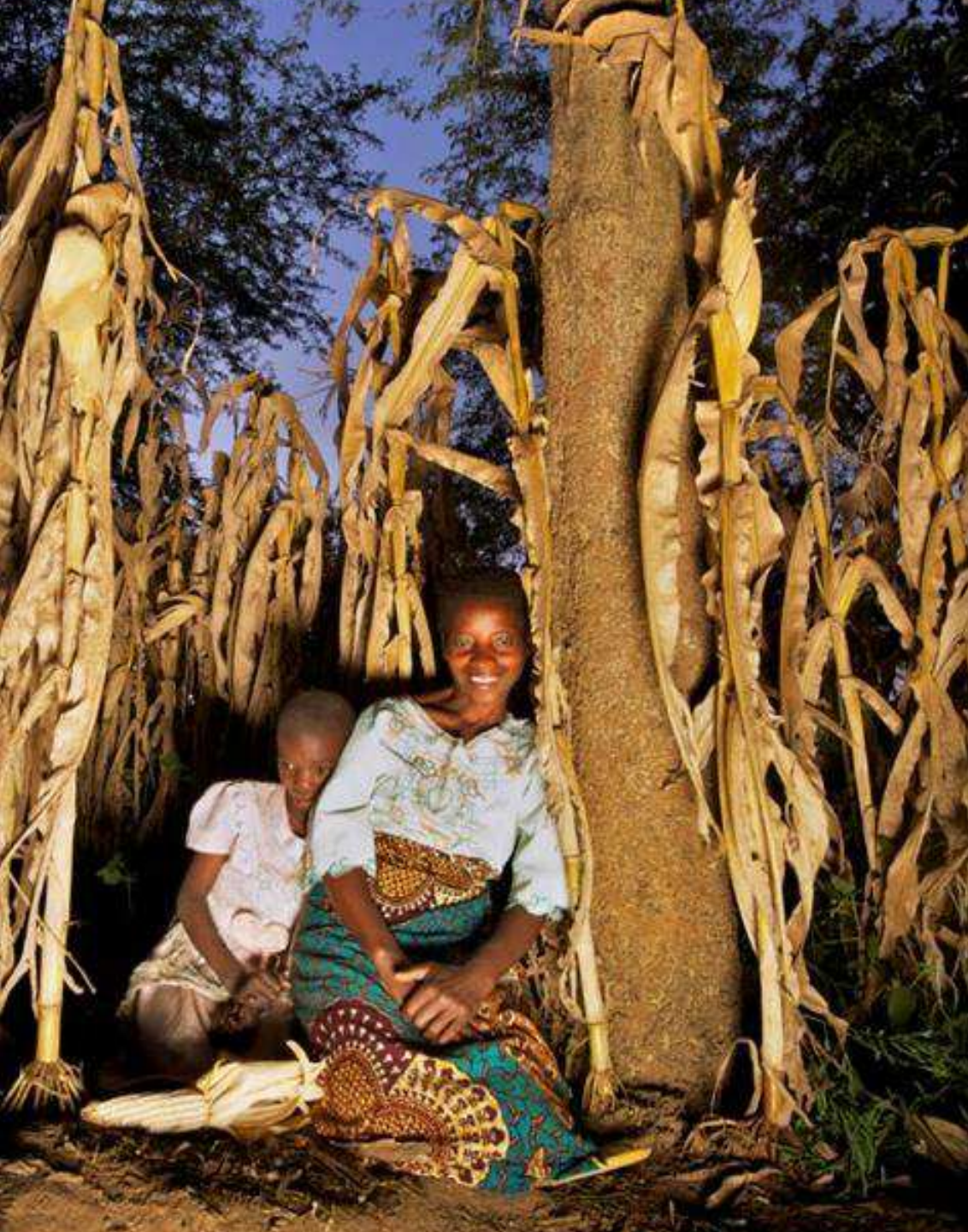
Genetic Intensification

- Improved varieties and breeds
- Drought & heat tolerance
- Pest & disease resistance/tolerance
- Nutrient use efficiency
- Photosynthesis, C assimilation, perenniality



Socio-economic intensification

- Enterprise diversification
- Market linkages
- Farmer organizations & field schools
- Innovation platforms
- Extension & education



Ecological intensification

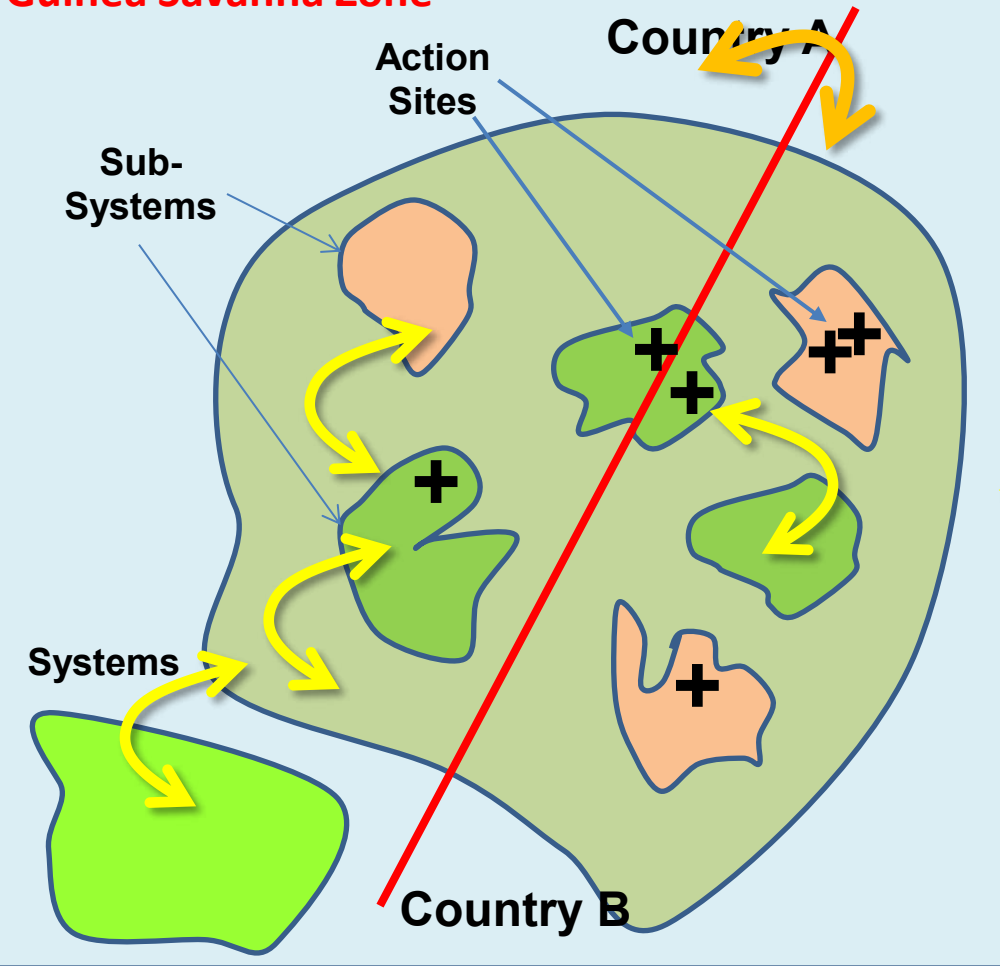
- Crops, livestock, shrubs & trees
- Nutrient cycling
- Fertilizer management
- Intercropping & rotations
- Whole-farm—cropped & non-cropped areas
- Above- and below-ground



Eastern & Southern Africa Maize-based Systems

Ethiopian Highlands

Guinea Savanna Zone



Fostering Spillover by Design

1. Implementation sites to local sub-systems
2. Implementation to non-implementation sub-systems
3. Sub-systems to (sub-) systems
4. Systems to systems
5. Sites to sites
6. Country to country barriers to spillover



- Data management & accessibility
- Cross-program integration & communication
- Expanded collaboration between CGIAR, National Ag Research, and U.S. university partners
- Greater linkages to development projects and partners
- Private sector engagement
- Increased emphasis on socio-economic components—
decision making, behavior change, participatory research
- Linking field- and farm-scales to community and
landscape scale impacts



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