Feed the Future Program for Sustainable Intensification

Jerry Glover          USAID          SANREM Annual Meeting          May 2014
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
Program for Sustainable Intensification

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
Program for Sustainable Intensification

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

<table>
<thead>
<tr>
<th>Program Description</th>
<th>Lead Institution</th>
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<tr>
<td>Cereal Systems Initiative for South Asia</td>
<td>CIMMYT</td>
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<td>Africa RISING</td>
<td>ILRI/IITA/IFPRI</td>
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<td>FTF Innovation Lab for Small-scale Irrigation</td>
<td>Texas A &amp; M</td>
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<td>Integrated Pest Management FTF Innovation Lab</td>
<td>Virginia Tech</td>
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<td>IPM Innovation Lab AFSI Associate Award</td>
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<td>SANREM FTF Innovation Lab</td>
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<td>Water and Livelihoods Initiative</td>
<td>ICARDA</td>
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<td>CGIAR – Aquatic Agricultural Systems</td>
<td>WorldFish</td>
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<td>FTF Innovation Lab for Sustainable Intensification</td>
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Program for Sustainable Intensification

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

Inputs
- INDIRECT:
  - Financial capital
  - Knowledge
  - Infrastructure
  - Technology
  - Markets
- DIRECT:
  - Labour
  - Water
  - Inorganic chemicals and/or organic matter
  - Biodiversity

Farmer & Community

Outputs
- Production
- Income
- Nutrition

Montpellier Panel Report 2013
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
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
FEED THE FUTURE
The U.S. Government’s Global Hunger & Food Security Initiative