



Recent Developments at USAID

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What does Feed the Future Do?

1. *Help farmers produce more*
2. *Help farmers get more food to market*
3. *Support Research & Development to improve smallholder agriculture in a changing climate*
4. *Strengthen Regional Trade*
5. *Create a better Policy Environment*
6. *Improve Access to Nutritious food and Nutrition Services*
7. ***Stimulate expansion of agricultural technologies “at scale”***





Criteria for Research Investment

(from Feed the Future Research Strategy)

- **Relevance to poverty, women and children** and reduced vulnerability objectives
- **Likelihood of success:** Technical merit, clear pathways for deployment/adoption of **sustainable technologies “at scale”**
- **Cost/Benefit:** Estimated cost to develop technology vs. potential returns in terms of impacts.
- **Economic sustainability** for producers/adopters
- **Natural resources sustainability:** water, soil, ecosystem and climate change.
- **Institutional sustainability/impact on capacity:** engagement of national and regional partners
- **Time Frame:** timeline, milestones
- **Risks:** potential impacts on vulnerable groups, environment or breakdown in key pathways



1 FEED THE FUTURE (FTF)



- **Whole of Govt. Presidential Initiative (USAID, STATE, USDA, MCC, PEACE CORPS, ETC.)**
 - Consultative process, USAID leads implementation with partners

2 USAID BUREAU FOR FOOD SECURITY (BFS)



- **Newly created USAID FTF Implementation Arm:**
 - **CSI Office** (relationships with field Missions)
 - **SPAMM Office** (budget, finance, accounting)
 - **MPI Office** (markets, public/private partnerships)
 - **ARP Office** (research)

3 OFFICE OF AGRIC. RESEARCH & POLICY (ARP)



- **ARP Leads the “Food Security Innovation Center”**
 - **Research Division**
 - **Policy Division**
 - **HICD Division (BIFAD + Borlaug Fellowships + Innovate)**

4 AGRIC. RESEARCH DIV. (R)



- **USAID/BFS/ARP/R**
 - Innovation Labs
 - CGIAR
 - Biotech Projects

Implement FTF/USAID Agric. Research Strategy



Major USAID FTF Hort Initiatives

Run by ARP Office (Wash-DC)

- 1. Innov. Labs (Hort & IPM)*
- 2. AVRDC and CGIAR CRPs*
- 3. Biotechnology (Production & Policy)*
- 4. Biofortification (Harvest Plus - OFSP)*

Run by Field Offices (Missions)

- 1. VALUE CHAIN PROJECTS*





Mission Value Chain Priorities: Hort

- ✓ **East Africa:** Kenya, TZ, Zambia, Moz., S.Sudan
- ✓ **West Africa:** Liberia
- ✓ **Asia:** Nepal, Bangladesh, Cambodia, Tajik., (Indonesia)
- ✓ **LAC:** Guatemala, Honduras, Haiti
- ✓ **New Hort VC Developments since Bangkok:**
 - Nepal – FTF Project (Winrock)
 - Kenya – KAVES (Fintrac)
 - Liberia – FEDS (DAI)
 - Guat. – 2 FTF Projects, 2 local NGOs
- ✓ **New Hort VC Developments since Nairobi:**
 - Haiti – huge new hort-focused VC follow on to “Winner”
 - Indonesia – ag portfolio in process of elimination



HORT IL 5-YR EXTENSION

- BAAR Approval!
- JEC Memo Submitted! – awaiting Dr. Shah signing
- RE-THINK THE 2014-19 PORTFOLIO

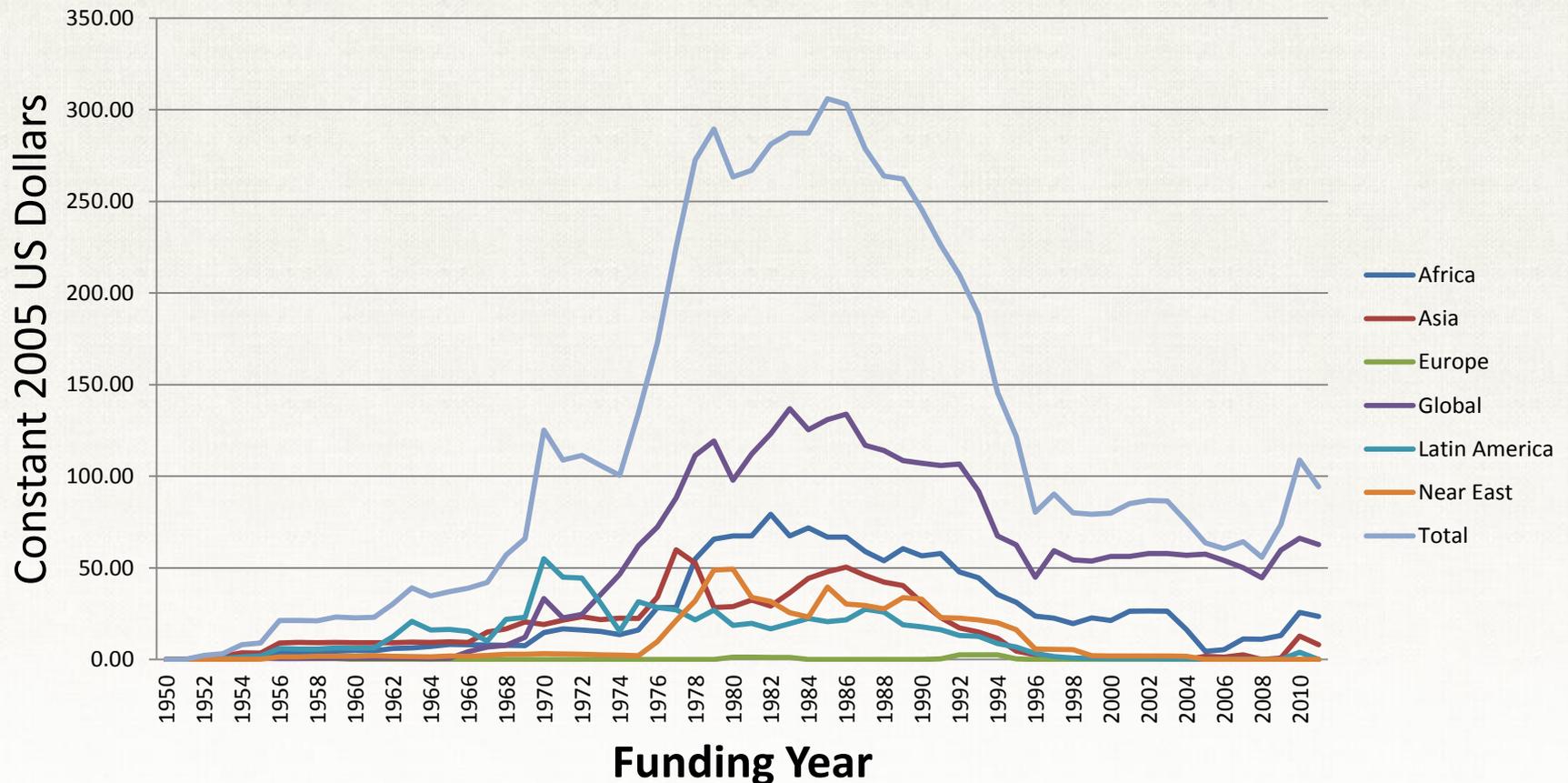


BUDGET ISSUES

- ARP OFFICE (10% vs. 15% “ask”; we remain at 10-15% of total FTF budget)
- HORTICULTURE LAB (stable, positive)



USAID Funding for Ag Research





NEW RESEARCH PORTFOLIO

- PROJECT EXPANSION
- STAFF EXPANSION (SOMEWHAT...)
 - Replaced retiring positions in Aquaculture, Biotech
 - Added new positions in Irrigation, Cereal Science, SI
 - Portfolio support from 6 Senior Fellows
 - Horticulture, Cropping Systems, Livestock, Plant Pathology, Mechanization, Gender



FEED THE FUTURE

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

Feed the Future

Food Security Innovation Center





FEED THE FUTURE

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FSIC Program Areas



Program for Sustainable Intensification (e.g. IPM IL, SANREM IL, CSISA, Africa Rising)



Program for Climate Resilient Cereals (e.g. Cereals RFA, DTMA, Arcadia PPP, Ceres PPP, CGIAR Rice/Wheat/Maize, Sorghum/Millet RFA)



Program for Advanced Research on Animal and Plant Diseases (e.g. USDA Partnerships under NBCRI, LCC IL, Virus Resistant Cassava)



Program for Productive Legume Research (e.g. Dry Grain Pulse IL, Peanut /Mycotoxin IL, CGIAR Legumes, NBCRI)



Program for Safe & Nutritious Foods (e.g. Horticulture IL, Nutrition IL, Aquafish IL, AVRDC, Aflatoxin under NBCRI)



Program for Policy Research & Support (e.g. AMA IL, Program for Biosafety Systems, Enabling Agricultural Trade)



Program for Human & Institutional Capacity Development (e.g. MEAS, InnovATE, MAETS, AWARD, LEAP)



Food Security Innovation Center

- Leads USAID's implementation of the FTF Research Strategy
- Integrated, portfolio-based management across seven priority program themes
- **Encourages a multi-disciplinary approach, better linkages among related projects, cross-project learning and management efficiencies**
- Engages U.S. universities, international research centers, private sector, local agricultural research and educational institutions, think tanks



Thematic Partnerships:

- Responding to critical gaps
- Expanded institutional involvement
- Public-private/international alliances

Target Subject Areas:

- Climate resilient cereals
- Climate resilient legumes
- Climate resilience and disease resistance in Livestock
- Small-scale irrigation and water management
- Post-harvest loss reduction
- Policy research and support





Help smallholder farmers adapt to climate change and build resilience by developing new cereal varieties with enhanced yield and tolerance to drought, heat, salinity and low soil fertility and delivering these varieties in diversified, sustainable farming systems

Program Area Technical Lead: Nora Lapitan

Current Research Projects	Activity Manager	Lead Institution
CGIAR Research Program 3.2 - MAIZE	S. Chapotin	CIMMYT
Water Efficient and Bt Maize for Africa	John McMurdy	African Agricultural Technology Foundation
Drought Tolerant Maize for Africa	John McMurdy	CIMMYT
Improved Maize for African Soils	John McMurdy	CIMMYT
Heat Stress Resilient Maize for South Asia	S. Chapotin	CIMMYT
CGIAR Research Program 3.3 – Global Rice Science Partnership	S. Chapotin	International Rice Research Institute
NEWEST Rice – Nitrogen Efficient, Water Efficient, Salt Tolerant Rice	Tracy Powell	African Agricultural Technology Foundation
Abiotic Stress Tolerant Rice	S. Chapotin	Ceres, Inc.
Abiotic Stress Tolerant Bioengineered Cereals	S. Chapotin	Australian Center for Plant Functional Genomics
Cereal Systems Initiative for South Asia – Breeding for Heat and Drought Tolerance in Rice and Wheat	S. Chapotin	CIMMYT and IRRI
Abiotic Stress Tolerant Rice and Wheat	S. Chapotin	Arcadia Biosciences
CGIAR Research Program 3.1 - WHEAT	S. Chapotin	CIMMYT
Heat Tolerant Wheat for South Asia	S. Chapotin	Arcadia Biosciences
Wheat Yield Network	S. Chapotin	CIMMYT
Feed the Future Innovation Lab for Climate Resilient Wheat	S. Chapotin	Washington State University
Feed the Future Innovation Lab for Applied Wheat Genomics	S. Chapotin	Kansas State University
CGIAR Research Program 3.6 - Dryland Cereals	Vern Long	International Center for Research on the Semi-Arid Tropics
Feed the Future Innovation Lab for Collaborative Research on Sorghum & Millet	Vern Long	Kansas State University
Feed the Future Innovation Lab for Climate Resilient Millet	Joe Huesing	University of California, Davis
Feed the Future Innovation Lab for Climate Resilient Sorghum	Vern Long	University of Georgia



Legumes research focuses on increasing the production and availability of nutritious legumes to improve food security, nutrition, soil health, and economic opportunities for poor farmers – particularly women.

Program Area Technical Lead: Vern Long

Current Activities	Activity Manager	Lead Institution
Feed the Future Innovation Lab for Collaborative Research on Peanuts & Mycotoxins	Vern Long	University of Georgia
Feed the Future Innovation Lab for Collaborative Research on Legumes	Vern Long	Michigan State University
Feed the Future Innovation Lab for Climate Resilient Beans	Tracy Powell	Pennsylvania State University
Feed the Future Innovation Lab for Climate Resilient Chickpeas	Tracy Powell	University of California - Davis
Feed the Future Innovation Lab for Climate Resilient Cowpea	Vern Long	University of California - Riverside
Insect resistant Bt cowpea	John McMurdy	African Agricultural Technology Foundation
CGIAR Research Program 3.5 Grain Legumes	Vern Long	ICRISAT
NBCRI – Legume Productivity	Tracy Powell	USDA/ARS



The Program for Advanced Approaches to Combat Pests and Diseases harnesses US scientific expertise and emerging molecular tools to develop new animal vaccines and crops and animals resistant to pests and diseases that cause significant production losses in tropical systems.

Program Area Technical Lead: Joe Huesing

Current Activities	Activity Manager	Lead Institution
Virus Resistant Cassava for Africa (VIRCA)	Joe Huesing	Danforth Center
Agricultural Biotechnology Support Program II	Joe Huesing	Cornell University
Venganza - Disease Resistant Staple Crops	John McMurdy	Venganza
Bacterial wilt resistant banana	Lindsay Parish	IITA
Late Blight Potato	Lindsay Parish	CIP
Feed the Future Innovation Lab for Rift Valley Fever Control in Agriculture	Lindsay Parish	University of Texas at El Paso
Feed the Future Innovation Lab for Genomics to Improve Poultry	Lindsay Parish	UC Davis
NBCRI - East Coast Fever Vaccine	Lindsay Parish	USDA/ARS
NBCRI - Goat Genomics	Lindsay Parish	USDA/ARS
NBCRI - Wheat Stem Rust	John McMurdy	USDA/ARS
CGIAR Research Program 3.4 – Bananas, Roots and Tubers	Joe Huesing	CIAT



Works with smallholder farmers to identify and adopt sustainable, productivity enhancing technologies and farming practices in major production systems where the poor and undernourished are concentrated; and through intensification and diversification of these systems, to enhance resilience, nutrition and agricultural growth.

Program Area Technical Lead: Jerry Glover

Current Activities	Activity Manager	Lead Institution
Cereal Systems Initiative for South Asia (CSISA)	Saharah Moon Chapotin	CIMMYT
Africa RISING	Jerry Glover	ILRI/IITA/IFPRI
Feed the Future Innovation Lab for Small-scale Irrigation	Biniam Iyob	Texas A & M
Feed the Future Innovation Lab for Collaborative Research on Integrated Pest Management (re-compete 2014)	John Bowman	Virginia Tech
IPM Innovation Lab AFSI Associate Award	John Bowman	Virginia Tech
Feed the Future Innovation Lab for Collaborative Research on SANREM (re-compete as SI Lab in 2014)	Joyce Turk	Virginia Tech
Water and Livelihoods Initiative (WLI)	Sarah Tully	ICARDA
CGIAR Research Program – Aquatic Agricultural Systems	Shivaun Leonard	WorldFish

Links research on the production and processing of safe, nutritious agricultural products to a learning agenda on household nutrition, including the utilization and access to fruits, vegetables, meat, fish, dairy and legumes with the goal of improving child survival, securing family investments in agriculture, and preventing and treating under-nutrition.

Program Area Technical Lead: John Bowman

Current Activities	Activity Manager	Institution
Horticulture Innovation Lab	John Bowman	UC - Davis
Horticulture Innovation Lab Assoc. Award: LAC Assessment	John Bowman	UC - Davis
World Vegetable Center-AVRDC (Core)	John Bowman	AVRDC
World Vegetable Center-AVRDC (Post Harvest)	John Bowman	AVRDC
USDA/NBCRI/Aflatoxin	John Bowman	USDA/ARS
Post Harvest Loss Reduction Innovation Lab	John Bowman	Kansas State University
Nutrition Innovation Lab - Africa	Maura Mack	Tufts University
Nutrition Innovation Lab - Asia	Maura Mack	Tufts University
CRP 4.0 - Nutrition	Maura Mack	IFPRI
Adapting Livestock to Climate Change Innovation Lab	Joyce Turk	Colorado State University
Aquafish Innovation Lab	Shivaun Leonard	Oregon State University
Aquafish Innovation Lab Associate Award	Shivaun Leonard	Oregon State University
CRP 3.7 – Meat, Milk and Fish	Shivaun Leonard	ILRI
Soybean Innovation Lab	Ahmed Kablan	University of Illinois
Harvest Plus - CIAT	Vern Long	CIAT



Accomplishments:

- Awarded 14 new Feed the Future Innovation Labs and transitioned CRSP portfolio:
 - Currently 23 Feed the Future Innovation Labs, 18 are less than 5-years old
 - Over 60 U.S. colleges and universities, 13 HBCUs and MSIs
 - Developing country institutions leading several sub-awards (USAID Forward)

Accomplishments Mentioned in Portfolio Review:

- Addition of new Innovation Lab research investments in post harvest loss reduction and soybean productivity/utilization
- **Hort Lab Associate Award: Completed major horticulture needs assessment for Central America**
- **Integration of Horticulture IL, AVRDC, and IPM IL activities into USAID/Bangladesh's flagship horticulture VC project led by CIP**
- Harvest +: Iron bean dissemination to 175,000 new farmers in Rwanda and DRC
- **AVRDC: Post harvest assessments completed for Mali, Ghana, and Tanzania**

Impacts:

- Livestock/GCC Lab has trained over 1000 primary school students in Tanzania and Nepal on basic poultry production skills
- Harvest Plus: Iron pearl millet seed purchased by > 150,000 farmers in India
- **Hort Lab in Zambia: Improved production for 231 farmers who produced 1158 tons of produce for income of \$2,034,047**



Scaling Up Innovative Technologies

- Identifying the potential target area to benefit
- Identifying spaces, pathways, and drivers
- Achieving sustainable adoption for national impact

Technology Adoption

- Pilot studies
- Capacity Building
- Policy alignment
- Facilitate responsible private sector investment and partnerships
- Value chain development & facilitation

Research: Developing Technology

Nutrition
Lab

Horticulture
Lab

SANREM
Lab



Scaling Plans Involving Hort

Country	Scaling Technologies	Value Chains
Kenya	OFSP, Hort IPM	Maize, Hort, Dairy
Liberia	??/ Seed Systems	Rice, Cassava, Hort, LStock
Malawi	OFSP, Soy	Legumes, Dairy
Mozambique	??/ Legumes	Legumes, Hort
Rwanda	Pyrethrum	Livestock, Dairy
Tanzania	3G potato, DT maize/rice	Hort, Rice, Maize
Uganda	OFSP	Maize, Beans, Coffee



Scaling Plans Involving Hort

Country	Scaling Technologies	FTF Value Chains
Zambia	OFSP, Con.. Ag., AflaSafe	Hort, Maize, Dairy
Bangladesh	??/ Seeds, Fish, UDP	Hort, Rice, Fish
Cambodia	Hort, Fish Fry, Rice Seed	Hort, Fish, Rice
Nepal	Hort IPM, Seeds, Markets	Hort, Rice, Maize, Legumes
Tajikistan	Onions	Hort
Guatemala	Hort Irrigation	Hort, Coffee
Haiti	Greenhouse hort prod.	Hort (veg + flowers)
Honduras	Healthy Homes, Irrigation, Solar Drying	Hort, Coffee



NEW PUSH ON NUTRITION RESULTS (STUNTING)

- NEED BETTER COUNTRY LEVEL EFFECTS TO REDUCE STUNTING
- WE NEED MORE DRAMATIC RESULTS IN OUR ZONES OF INFLUENCE SO NATIONAL LEVEL RESULTS ARE IMPROVED
- NEED TO BETTER DESCRIBE IN QUANTIFIABLE TERMS WHAT OUR TARGETS ARE IN STUNTING AND POVERTY REDUCTION – SCALING COULD PLAY KEY ROLE
- RESEARCH AGENDA NEEDS TO CONTRIBUTE TO THIS GOAL
- **EXTERNAL REVIEW OF FTF NUTRITION & POVERTY IMPACT EXPECTED IN 2015!!**



- In recent years, **poverty rates have fallen by an annual average of 5-6 percent** across Feed the Future focus countries.
- **Stunting has also decreased by an average of 5-6 percent** from 2009 to 2012.
- Approximately **7 million** farmers applied new technologies and practices in FY12, which is more than four times greater than the number in FY11.
- **Over 3 million** hectares of land came under improved cultivation and management practices in FY12, almost double the amount of hectares in FY2011

CONSENSUS – *NOT GOOD ENOUGH!!*



HIGH PRIORITY NEXT STEPS

- Identify our **existing** best bets for scaling
- Create 1-2 **new** efforts highly focused on scaling
- Ramp up nutrition analysis of best bet existing projects, create 1-2 new projects strongly focused on nutrition
- **Is OFSP a natural ramp-up for us!?**
- Pursue collaboration with Nutrition/Fish Labs in Asia (growing veg on fishpond dykes)
- Create 1-2 new projects with a strong collaboration with other ILs
- Burma!
- Associate Awards, or direct support of Mission VCs
- Probably need overall reduction in number of activities to accomplish this....
- **Strive for relevancy/legacy!!**



FEED THE FUTURE

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“Asante sana”/ “Cam on”/ Thank you!
(www.feedthefuture.gov)

