



FEED THE FUTURE

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



Update on the USAID/BFS Research Impact Assessment



USAID
FROM THE AMERICAN PEOPLE

Tyrell Kahan & Annica Wayman
September 13, 2017

Photo credit: Kashish Das Shrestha, USAID



FEED^{THE}FUTURE

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

BACKGROUND

- Research investments “ensure a pipeline of innovations, tools and approaches designed to improve agriculture, food security, resilience and nutrition priorities in the face of complex, dynamic challenges.”
- USAID’s commitment to Collaborating, Learning and Adapting and the creation of the GFSA, GFSS and GFS Research Strategy inspired a reflection on the FtF research investments
- Enhance the documentation and communication of the outcomes and impacts of FtF research activities to improve the ability to demonstrate their contributions to the goals of GFSS



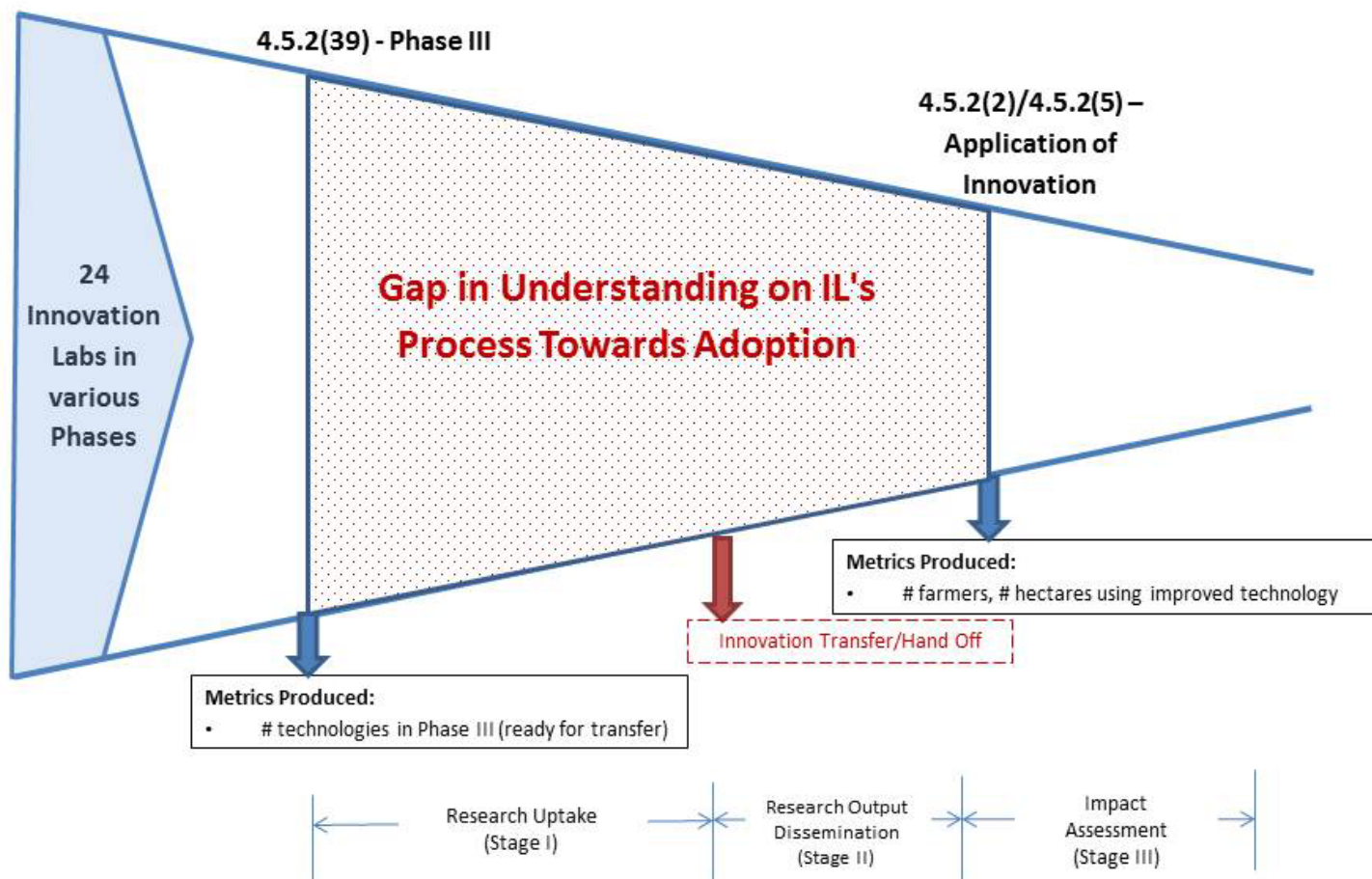
USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

RESEARCH IMPACT ASSESSMENT



USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

RESEARCH UPTAKE STUDY

- **Objective**

- Gain a better understanding of how the Phase III research outputs of ILs are being transferred to entities from the public and/or private sectors for dissemination and use by farmers

- **Project Implementers**

- Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification (SIIL)
 - B. Jan Middendorf, Ph.D. (Project Lead)
 - Zach Stewart, Ph.D.



USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

RESEARCH UPTAKE STUDY

- The Phase III innovations from the FtF Innovation Labs were identified from the Research Rack Up
- SIIL implemented an on-line survey using Qualtrics™, analyzed data and created report
- Survey was designed for IL Directors to report on the transfer or planned transfer of innovations from each IL to entities that are facilitating their adoption and dissemination



USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

RESULTS

- **Survey included 130 innovations from 12 FtF Innovation Labs**
- **105/130 innovations (80.8%) were reported as transferred**
 - About 2/3 of all transferred innovations were categorized as either Management and Cultural Practices (34.6%) or Biological (39.2%)
- **182 'cases' of innovation transfer to a dissemination entity**
 - Over half of the 'cases' of innovation transfer were to Host Country (Government) (34.3%) or Private Sector (24.3%) organizations
 - 96 unique dissemination entities



USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

CHALLENGES TO INNOVATION TRANSFER

- **Partners**
 - Finding appropriate partners to scale the innovation
 - Finding appropriate private pathways for low value crops
- **Adoption/Scaling**
 - Understanding scaling and the variation of optimal dissemination processes according to inherent qualities of innovations and target country context
 - Identifying and handling immature innovations
 - Insufficient enabling environment
 - Innovations that are important to improving production quality are difficult to promote if a clear financial incentive doesn't exist
 - The lack of a sustainable seed system impedes true adoption
- **Monitoring the dissemination and adoption of an innovation both during and after transfer occurs**
- **Acquiring investments that appropriately support scaling including technology transfer, adaptation, and dissemination**



USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

SUGGESTED GOOD PRACTICES FOR INNOVATION TRANSFER

- **Partnerships**
 - Identify appropriate scaling entities, communicate with them early in the process, and continue to do so during and after the transfer process
- **Impact Pathway Plan (IPP) and Project Planning**
 - Well developed IPP can be very valuable
 - Understand timeframe required to achieve project objectives, create sustainable relationships, and build local capacity for innovation
- **End User**
 - Engage the end-users during the planning, research, and product development/adaptation process
- **Policy**
 - Invest in research and policy needs before technology dissemination in order to ensure an appropriate enabling environment is present



USAID
FROM THE AMERICAN PEOPLE



FEED^{THE}FUTURE

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

TAKEAWAYS FROM RESEARCH UPTAKE STUDY

- **Verification of the Research Rack Up**
- **Project Management and Planning**
- **Project Monitoring and Evaluation**
- **Inform Stage II of the Research Impact Assessment (Research Output Dissemination Study)**



USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

STAGE II OF RESEARCH IMPACT ASSESSMENT

- **Research Output Dissemination Study (Stage II)**
 - Study the dissemination, use, and adoption of a subset of transferred innovations identified in the Research Uptake Study
 - Observe how entities working on dissemination, use, and adoption are working and engaging the ILs during the scaling process
 - Evaluate design and implementation of dissemination plans and relevant enabling environment factors
 - Determine the current and potential outcomes and impacts of the innovations on the target populations
- **SIIL will manage the sub-award**
<http://www.k-state.edu/siil/index.html>



USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

DISCUSSION

- **Feedback on Research Uptake Study (Stage I)**
- **Additional Challenges or Suggested Best Practices for Innovation Transfer**
- **Approaches or considerations to measuring and monitoring impact of agriculture research**
 - **Frameworks or Conceptual Models**
 - **Metrics**
 - **Timing**
 - **Reporting**
 - **Phase of research**



Photo Credit: Rhiannon O'Sullivan, World Vegetable Center



USAID
FROM THE AMERICAN PEOPLE



FEED^{THE}FUTURE

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

ADDITIONAL INFORMATION

U.S. Government's Global Food Security Strategy and Technical Guidance

(<https://feedthefuture.gov/lp/guidance-and-tools-global-food-security-programs>)

U.S. Government's Global Food Security Research Strategy

(<https://feedthefuture.gov/resource/us-governments-global-food-security-research-strategy>)



USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

REFERENCES

- Davies, J., Adolph, B., Proctor, F., van der Gaag, N., and Carlile, L. (2009). *Learning lessons on research uptake and use: Donor review on research communication*. Department for International Development. Available at https://assets.publishing.service.gov.uk/media/57a08b3c40f0b64974000a58/DFID_research_communication_donor_review_final_161009.pdf
- Johnson, M. (2015). *Literature review: scaling agricultural technologies and innovation diffusion*. Prepared by Management Systems International and Development & Training Services for the E3 Analytics and Evaluation Project.
- Pray, C., Masters, W. and S. Ayoub. (2017). Impacts of Agricultural Research on Poverty, Malnutrition and Resilience.
- Shiell-Davis, K., Wright, A., Seditas, K., Morton, S., and N. Bland. (2015.) *What Works Scotland Evidence Review: Scaling-Up Innovations*. What Works Scotland Evidence Bank for the Scottish Government. Available at <http://whatworksscotland.ac.uk/wp-content/uploads/2015/06/WWS-EB-evidence-review-Scaling-Up-Innovations-June-2015.pdf>
- Wahab, S., Rose, R., and S. Osman. (2012). *Defining the Concepts of Technology and Technology Transfer: A Literature Analysis*. International Business Research 5(2):61-71.



USAID
FROM THE AMERICAN PEOPLE



FEED^{THE}FUTURE

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

APPENDIX



USAID
FROM THE AMERICAN PEOPLE



FEED THE FUTURE

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

RESULTS

Table 1. Frequencies of Innovation Categories and Percentage Transferred.

Category	Frequency ^b	Number Transferred/Frequency	Number of Entities Involved in Transfer
Mechanical and Physical	18 (13.8%)	10/18 (55.6%)	15
Biological	51 (39.2%)	43/51 (84.3%)	68
Chemical	0 (0%)	0 (0%)	0
Management and Cultural Practices	45 (34.6%)	40/45 (88.9%)	70
Other ^a	16 (12.3%)	12/16 (75%)	29
Total	130	105/130 (80.8%)	182



USAID
FROM THE AMERICAN PEOPLE

^aThe "Other" responses included "financial technology," "food science," "diagnostic," "testing," "pheromone chemical put into the trap," and "includes both biological & management and cultural practices. One IL indicated that their innovations related to "all of the above" categories.

^bPhase III innovations



FEED^{THE}FUTURE

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

www.feedthefuture.gov



USAID
FROM THE AMERICAN PEOPLE