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

Feed the Future **Research Output Dissemination Study (RODS)** intends to gain a better understanding of the dissemination, use, and adoption of innovations from the Feed the Future Innovation Labs (ILs).

The Research Impact Assessment

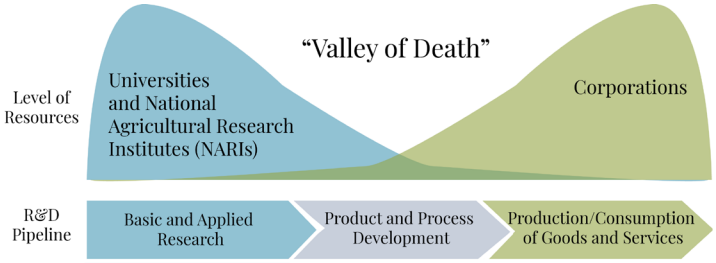
Part 1: Research Uptake Study (RUS)

Part 2: Research Output Dissemination Study (RODS)

Part 3: Proposed Impact Studies (TBD)

RODS was designed to explore the dynamics between partners and other organizations at the critical juncture where innovations are deemed available for uptake and are transferred to a dissemination entity.

Challenges for Innovations



- Transitioning academic-based innovations to productive and/or profitable use is notoriously difficult, even in markets with robust investment infrastructure and well-educated consumers.

- The failure of technologies to transition from lab to marketplace is called the "valley of death" in Technology Transfer literature.

- Technology Transfer is more difficult in Feed the Future focus countries, where institutions and infrastructure are weak and the generation of consumer demand requires substantially more effort than countries with less fragmented markets.

Case Studies

Conservation Agricultural Practices
- Kenya & Nepal
- Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program

Drying Beads
- Bangladesh
- Horticulture Innovation Lab

Hermetic Storage Bags
- Bangladesh
- Reduction of Post-Harvest Loss Innovation Lab

Tomato Grafting
- Bangladesh
- Integrated Pest Management Innovation Lab

High-Efficiency Solar Dryer
- Senegal
- Food Processing and Post-Harvest Handling Innovation Lab

Index-Based Livestock Insurance
- Kenya
- Assets and Market Access Innovation Lab

Insect Resistant Cowpea
- Senegal
- Grain Legumes Innovation Lab

Trichoderma
- Nepal
- Integrated Pest Management Innovation Lab

Key Results

- **Some evidence of adoption existed in all cases,** except for the Solar Dryer**.**
- **Substantial evidence** of adoption observed for **Index-based Livestock Insurance, Drying Beads,** and **Trichoderma.**

- Scaling at the national level was observed in two cases (**Drying Beads, Trichoderma**) where foundations for market-driven diffusion already existed. Scaling at both the national and regional levels was observed in at least one case (**Index-based Livestock Insurance**) with a mixture of public and private support.

Innovation Labs generate innovations that confer both private sector opportunities and benefits for the greater good of the public. Innovations are developed with the intention of continued scaling and impact beyond the lifespan of the Innovation Labs.

Opportunities

Systems Investments and Context Dependence

RODS recommends **enabling environment factors be considered and examined more seriously when selecting locations for projects that have scaling as a central goal.** RODS found that a concerted effort between technology development, policy engagement, capacity building and marketing is necessary to build informed, effective demand for a technology. In many cases, successful adoption efforts relied upon substantial prior investments that built the capacity of the local system.

Product Development and Market Analyses

RODS recommends that **researchers undertake earlier, rigorous economic or financial analyses** as part of product development efforts. Researchers should consider enlisting assistance from other units within partner universities that may be engaged in translational research support, intellectual property management, and business incubation.

- Example: Economic factors such as financing were significant barriers to widespread adoption of **Solar Dryer, Drying Beads**, and **Index-based Livestock Insurance**.

Identify In-Country Champions

RODS recommends **Innovation Labs strategically engage stakeholders along the impact pathway, identify strong local scientific and non-scientific partners, and explore various models to increase in-country presence**. RODS found that strong in-country organizational presence and innovation champions were significant contributing factors to successful dissemination of innovations.

- Example: The IPM IL maintains offices in Nepal and Bangladesh at relatively low cost; thus, allowing for increased in-country presence and a deeper understanding of the local enabling environment.

Leveraging Funds

RODS recommends **universities pay earlier attention to the challenges of product development and marketing further downstream** and begin to identify the investment needs that will be required at later stages of product development and innovation scaling.

- Example: **Index-based Livestock Insurance** was successful at attracting funds from multiple donors by virtue of novelty and promise of innovation. They published numerous impact assessments, success stories, and lessons learned to promote the innovation.

- Example: The Integrated Pest Management IL leveraged funds to develop and disseminate **Trichoderma** via an Associate Award funded by the USAID Nepal Mission.

Technology Packages

RODS confirmed that **technologies are more likely to be disseminated and adopted as part of a package containing both technical elements and organizational knowledge.**

- Example: Adoption of **Drying Beads** was dependent upon disseminating them as part of a package that also contained storage containers and an organizational scheme for seed companies to service the drying beads after use by the producers.

Formal Implementation Research

Implementation research is the scientific study of the methods of promoting the application of research findings. It helps to inform on-going strategy development and adaptations to product design and delivery mechanisms.

RODS recommends that **researchers strive to engage in opportunities to contribute scientific expertise and skills to development programming** as their engagement can be extremely useful to scaling innovations.