



Feed the Future Innovation Lab
for Collaborative Research on
Grain Legume



Scaling Up in Agriculture and Nutrition: Concepts and Models

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The reality, the context

- Legume Innovation Lab is a **publicly funded** program
- It is a **research program** supported from the **'development assistance'** pot of U.S. government funding to promote the objectives of the Feed the Future development strategy
- Thus, we need to ensure that the **Legume Innovation Lab research is impactful**



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Refresher: What is impactful research?

- Two key parameters determine 'impacts' of research
 - ✓ Adoption (the use and uptake of research outputs)
 - ✓ Effect size (the benefit per unit of adoption of a research output in relation to an existing practice/technology)
- Larger the values of these two parameters, larger will be the 'impact.'
- If no adoption → No impact
- If zero or low effect size (benefit) per unit of adoption → No adoption → No impact

This presentation is focused on increasing the LEVEL OF ADOPTION, which is an outcome indicator of SCALING UP



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Outline

- What is scaling up and its importance
- Key concepts
- Examples of two scaling up interventions in agriculture and nutrition
- Implications for Legume Innovation Lab research program



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What is scaling up and why it is important?

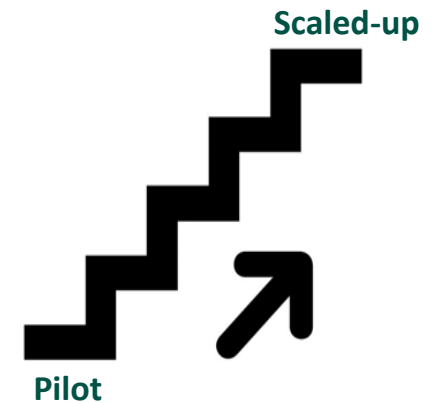
- Scaling up expands, replicates, adapts, and sustains successful policies, programs, or projects to reach a greater number of people
- Taking successful technologies/innovations to scale is critical to reduce rural poverty and malnutrition, because:
 - it implies more people are impacted by the efficiency gains and nutritional enhancement embedded in a technology, product or an innovation that is being scaled up



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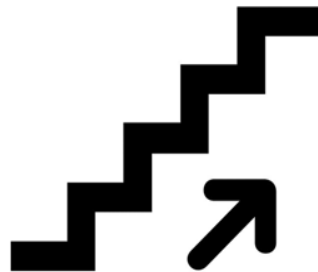
The concept: Pathways for scaling up

- A scaling-up pathway is the sequence of steps that need to be taken to ensure that a successful pilot or technology is taken from its experimental stage through subsequent stages to the scale ultimately judged to be appropriate



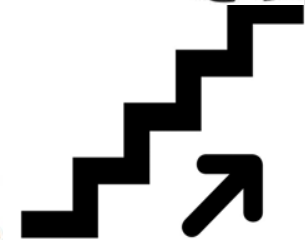
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But...scaling up is **NOT** about transforming a little baby into a BIG baby



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...It is about transforming a little baby into a mature and independent (i.e., self-sustaining) adult



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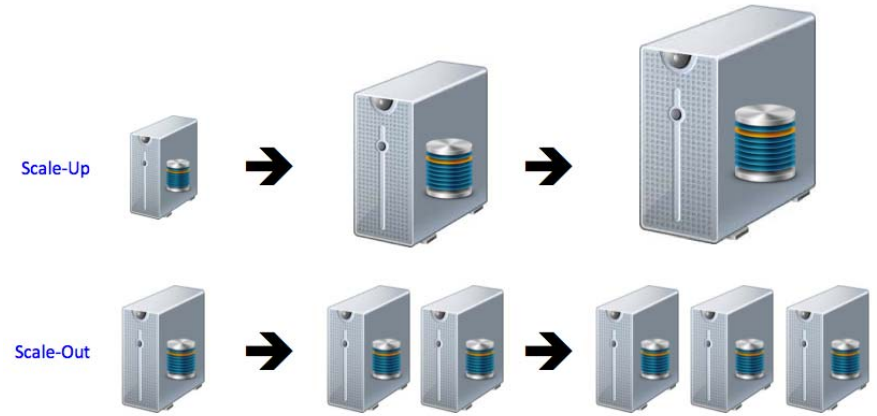
Pathways for scaling up

- The process generally is not linear but an iterative and interactive cycle as the experience from scaling up feeds back into new ideas and learning.



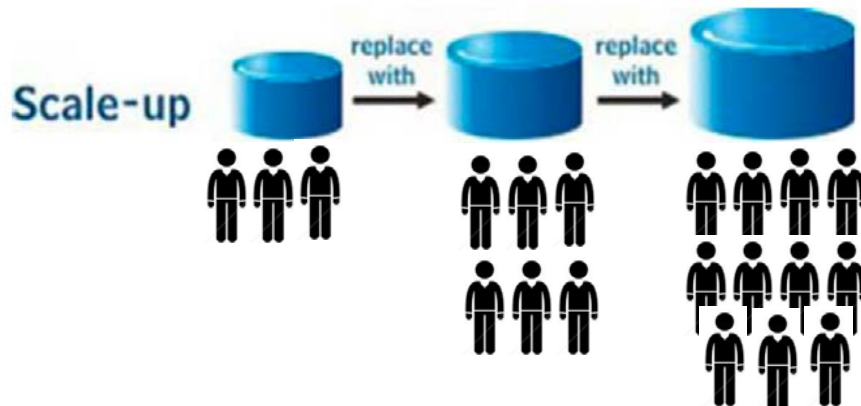
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Scaling-up pathways can follow different dimensions



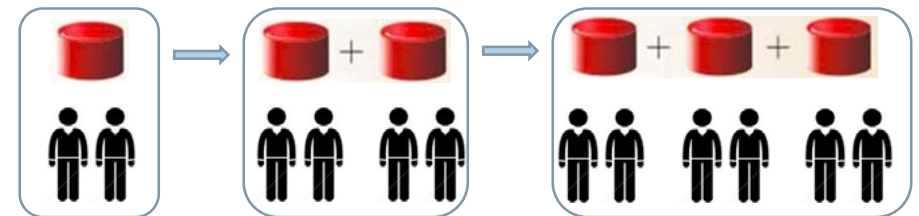
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SCALING UP is expanding the services or capacity to reach more people in a given geographic area (e.g., a city) or across geo-political units (e.g., county, state, country)



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SCALING OUT is replicating the model from one geographical area (e.g., from Michigan) to other geographical areas (to Ohio, Iowa, Texas)



Scale - Out



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Successful scaling up/out requires...

Drivers:

- Demand is fundamental
- Local champions
- Incentives, motivations of principle agents
- Knowledge and adapted learning tools



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Successful scaling up/out requires...

Enabling Environment: identifying and strengthening

- Delivery Mechanisms
- Supporting institutions
- Markets and market incentives (incl. financial)
- Critical partnerships organized
- Organizational capacity



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No blueprints for when and how to take technologies / programs to scale

Two examples:

To illustrate the concepts and experience of scaling up in agriculture and nutrition within the Legume Innovation Lab

1. The Bean Technology Dissemination (BTD) project
2. MásFrijol

Looking for insights on models of scaling up to address the key global issues of agricultural productivity and food security



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BTD Project: Scaling up models

- Used varied and context specific models to scale up the production and distribution of proven bean technologies to reach 20-30K farmers in each country
- Guatemala – **Functional expansion and scaling up** of NARS led seed production and distribution system to national level
- Honduras – **Scaling up** of NARS and university led seed production and distribution system to major bean growing regions by **expanding the network**
- Nicaragua – **Scaling out** of the community seed bank (CSB) model from a few in 2010 to 200+ in 2013



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BTD Project: Drivers and Enabling Environment

Drivers

- **Local champions:** NARS partners
- **Motivations of principle agents:** Breeders, bean researchers, extension agents
- **Demand:** for seeds by farmers and for knowledge to learn other technologies
- **External catalyst:** USAID FTF strategy
- **Pre-existing model:** CSB in Nicaragua; strong govt. support to scale out

Enabling environment

- **Institutional capacity** pre-existed due to a long history of CRSP investments in these countries
- **Partnership:** Strong linkages/network of partners from different sectors (NARS, Univ, NGO, CIAL, extension)
- **Political support:** Support of the government and NARS leadership to the goals of BTD project



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Másfrijol

More beans in the field and more beans in the diet

- BTD lessons: Technology transfer (bean varieties and seed multiplication) in the highlands
- Functional expansion as well as horizontal replication and desire to create expansion of services: Nutrition along with ag productivity
- More beans in the field and more beans on the table
- Delivery mechanisms and innovations
- Strengthening partnerships and the enabling environment to ensure sustainability



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Másfrijol: Key components

Drivers:

1. Community consultations to identify needs, demands
2. Gender-Integrated approaches for engagement of women and men
3. Strong local partners as drivers, motivated to reach more rural populations
4. USAID FTF Implementing Partners in the Highlands of Guatemala
5. Nutrition messages and activities adapted to resources, traditions, languages, etc.
6. Reach Farmers at their doorstep, with appropriate technologies



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Másfrijol: Key components

Enabling environment:

1. Local NGO engaged that knows how to adapt technology, nutrition messages to resources, traditions, etc.
2. Facilitating local institutions with collaboration that can reduce the costs and overcome barriers to reaching relatively isolated rural populations
3. Strong political support across Ag and Health Ministries, national, regional and local levels, although these two Ministries do not have history of working together



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Looking ahead...

How do we (the Legume Innovation Lab) keep the vision of scaling up upfront and center in our research?



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Implications for researchers

- **Think beyond the 'project' mode**
 - Define from a project's start the scale to which an research output should or could ultimately be taken
 - Explore from the outset (now) and throughout the next four years the potential scaling-up pathways that can ensure that the output you generate is not a one-time event but the stepping stone toward a wider and sustainable impact



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Implications for researchers (cont'd)

- **Follow the impact pathway**
 - Each Legume Innovation Lab project has undergone the exercise of developing an Impact Pathway, which for some projects is similar to the pathway for scaling up. Integrate these steps into your workplan and make yourself accountable (by delivering intermediate results along the impact pathway)
 - Ensure the buy-in of the community, the government, and other stakeholders



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Implications for researchers (cont'd)

- **Integrate monitoring and impact evaluation (M&IE) in your pilot testing of an idea, model, or approach, and**
 - Use the knowledge acquired from the successful pilot experience to scale up the model to create larger impacts (learn what the potential drivers or constraints are for an eventual scaling-up process)
 - Use the experimental nature of the innovation process and any failures to derive lessons on what doesn't work and what not to do



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Thank you

References:

Richard Kohl and Scaling up <http://agrilinks.org/media/scaling-gee-richard-kohl-keynote-presentation>

Finch Fund: <http://europeandcis.undp.org/blog/2014/02/06/innovation-for-development-scaling-up-or-evolving/>



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