



FEED^{THE}**FUTURE**

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

Scaling Strategies at USAID

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Scaling Technologies



Remarks by Administrator Rajiv Shah to the CGIAR Board of Directors

Friday, December 7, 2012

Nearly fifty years ago, when USAID Administrator William Gaud coined the term Green Revolution, he was speaking not just about the new varieties of wheat and rice, but about the vast potential of agricultural technology to open new frontiers in development.

It wasn't long before the Consultative Group on International Agricultural Research (CGIAR) was formed. **The CGIAR was a response to a growing recognition that a worldwide network of agricultural research centers was needed to carry on the ideals of the Green Revolution.**

Within a decade, the CGIAR had grown to include over a dozen centers—from Mexico to Nigeria.

But the ultimate test of an international research system is not the glamor of the inventions, but the impact of its results.

Today, we have technologies that can help farmers grow more productive crops and improve water management. **The evidence base is growing around a select number of technologies that—if taken to scale—can impact tens of millions of lives.**

But those technologies are not reaching nearly enough farmers.



USAID SCALING PROCESS

- Vision/Commitment (Dr. Shah, Dec. 2012)
- Mission/ARP Bonding (early 2013)
- Draft Technology Inventories (mid-2013)
- Formation of a formal BFS “Scaling Team”
- Missions Draft Scaling Plans (mid-2013)
- ARP/CSI/SPMM Analysis of Scaling Plans (mid-late 2013)
- Mature Scaling Plans Submitted (late 2013)
- Recruit Expert External Scaling Consultants (late 2013)
- Ethiopia Scaling GLEE (Dec 2013)
- Bangkok Scaling GLEE (Jan 2014)
- Global Innovation Lab Mtg.: Focus on Scaling (Mar 2014)
- LAC Scaling GLEE (Mar 2014)
- External Scaling Consultants go to Missions to Assess and Fine-Tune Existing Scaling Plans (Mar 14 =>)



DRAFT TECHNOLOGY INVENTORY (HORTICULTURE)

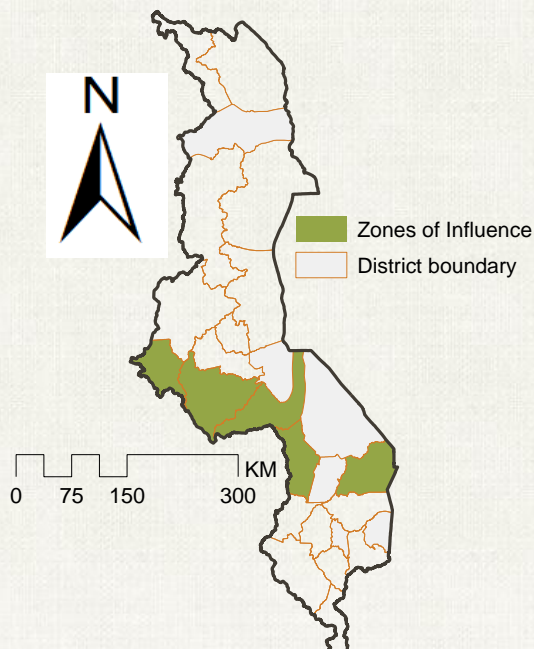
- Tomato and pepper varieties resistant to whitefly-transmitted virus
- African leafy vegetables
- Vegetable grafting (protection against soil disease/off-season prod.)
- Portable shade structures
- OFSP
- Pro-vitamin A cassava
- High yielding, late blight resistant potatoes for highlands and mid-elevation humid tropics
- Home gardens/School gardens/Sack gardens
- Bt eggplant
- Transgenic banana resistant to *Xanthomonas* wilt
- Host-free period for area-wide mgmt of tomato viruses
- Microbial soil amendments (Trichoderma-based)
- Area-wide mgmt. of invasive fruit fly in Africa (pheromone traps)



DISCUSSION MATRIX FOR EACH PROPOSED SCALABLE TECHNOLOGY

- Brief description
- Key potential impact by region
- Key partnerships
- USAID Missions currently supporting the technology
- Key aspects of nutrition/gender/climate
- Current status of scaling up
- Potential to scale by region
- Constraints to widespread adoption

Focus Areas



Focused Investment

Value chain focus: Legumes and dairy

Geographic narrowing: Seven districts straddling central and southern regions (Dedza, Mchinji, Lilongwe, Ntcheu, Mangochi, Balaka, and Machinga)

Key objectives:

- Improved nutritional status of women and children
- Value chain investments to develop markets and improve nutritional options
- Engaging the Malawi government to improve the policy environment

Technology	Contributing Impacts	Category
Drought tolerant maize varieties and hybrids	Increased productivity and resilience	Cereal
Vitamin A Enriched Maize	Nutritional Outcomes	Cereal
Orange fleshed sweet potato (OFSP)	Nutritional Outcomes	Root & Tuber
Aflatoxin mitigation in groundnut	Nutritional Outcomes / Improved Marketability	Legume
High yielding, promiscuous soybeans	Nutritional Outcomes / Increased Productivity	Legume
Higher yielding, drought tolerant pigeonpea	Nutritional Outcomes / Increased Productivity	Legume
Small fish ponds as demand driver for soy	Nutritional Outcome / Improved Marketability	Animal Sourced Foods
African indigenous vegetable production	Nutritional Outcomes	Horticulture



SCALING PLAN GUIDANCE FOR MISSIONS

- Identify technology (or bundle) for use in the VCs
- Define the scaling potential
- Provide baseline indicators and targets for FY12-15
- Arrange stakeholder consultations to generate buy-in
- Identify constraints to sustainable adoption
- Identify pathways from FY12-15 that will result in increased adoption
- Describe “tradeoffs” that will occur within the pathways
- Describe impact on gender, nutrition, environment, private sector partners



Scaling Plans Involving Hort

Country	Scaling Technologies	Value Chains
Kenya	OFSP, Hort IPM	Maize, Hort, Dairy
Liberia	??/ Seed System Strengt	Rice, Cassava, Hort, LStock
Malawi	OFSP, Soy	Legumes, Dairy
Mozambique	??/ Legumes	Legumes, Hort
Rwanda	Pyrethrum	Livestock, Dairy
Tanzania	??	Hort, Rice, Maize
Uganda	OFSP	Maize, Beans, Coffee



MALAWI : KEY ELEMENTS OF OFSP SCALING PLAN

Scaling Plan: Orange Fleshed Sweet Potato

Focal Technology: Orange-Fleshed Sweet Potato (OFSP)



- Cultivation of superior OFSP varieties has the potential to impact nutrition, resilience to climate change and women's empowerment
- Target population: Smallholder farmers in Malawi's Central Region (encompassing FTF Zol)

Context:

Country Strategy Background: FTF targets smallholder farmers (0.5-1.2 ha) in the Central and Southern Regions. In FTF Zol, 61% of population lives on <\$1.25/day; 40% of households report moderate to severe hunger; 48% of children <5 are stunted, and the prevalence of children 6-23 months with a minimum acceptable diet is 18%. Legumes and dairy are target value chains, but OFSP's potential to improve nutrition, increase climate resilience and empower women justifies its inclusion.

Constraints & Risks: Drought; sweet potato weevil and sweet potato virus; limited commercial demand from processors.

Opportunities: Potential to improve Vitamin A consumption; drought tolerance increases resilience of maize-based farming systems; some interest from commercial processors; existing technology for processing at village-level; women's empowerment.

Current Efforts:

- 101,047 households have been reached through the distribution of OFSP vines over three years under existing programs in Malawi (not limited to FTF Zol or USAID supported programs)
- Title II MYAP in Malawi has promoted OFSP production and consumption in the Southern Region (some overlap with FTF Zol)
- Sweet potato (OFSP and other varieties) is currently planted on 204,200 hectares in Malawi; analysis shows that more than 300,000 additional hectares are suitable for sweet potato production

Path Forward:

Pathways: Increased farmer demand for clean OFSP vines from agro-dealers; increased demand for OFSP for processing by village-level and commercial processors

Three-Year Targets:

- 300,000 farmers will adopt OFSP production
- 60,000 additional hectares will be under OFSP cultivation
- 15 organizations (associations, CBOs and private enterprises) will adopt OFSP production and processing technologies

Key Partners: CIP, IFPRI, Presidential Initiative on Poverty and Hunger Reduction, ICRISAT, Seed Trade Association of Malawi (STAM)



Key Scaling Workshop Learnings for USAID Community

- **Scaling means sustainability and impact is driven more by incentives than the efficiency of the technologies**
- **Who will implement at scale? (probably not USAID...)**
- **For scalability, you have to have alignment with incentives...**
- **How can donor projects trigger the tipping point for population level impact? (can occur after threshold of “early adoption” is passed)**
- **Scaling is not just about hitting large numbers, have to build financial and political capacity (multiple pathways) so as to create an enabling environment where adoption explodes (non-linear...)**
- **Problem: USAID contracting mechanisms don't monitor post project period. We are not tracking secondary/tertiary (indirect beneficiaries) to measure our success...**
- **USAID needs to stimulate the “early adopters”, but without distorting the market...**
- **Our projects/efforts need to help adopters get to a critical mass that spontaneously triggers widescale adoption... Must shift from a managed to a “spontaneous” philosophy....**



Scaling up pathway: drivers & spaces (courtesy Richard Kohl)

Drivers (champions, incentives, market or community demand, etc.)

Spaces (enabling factors)

Fiscal and Financial
Organizational
Policies
Political
Environment
Partnership
Etc

Innovation

Vision of Scaled Up Program

Goals for Scaling Up:
Monitor Process and Outcomes



Scaling Up is different from Project Management (courtesy Richard Kohl)

Project Management

1. Linear
2. Beneficiaries and Non-Beneficiaries
3. Clear ownership and decision rights
4. Dedicated Resources
5. Skills: technical, management & financial

VS

Scaling Up

1. Non-linear & Iterative
2. Winners and Losers
3. Multi-stakeholder, "Nobody-in-Charge"
4. Usually not resourced
5. Skills: Boundary spanning, system strengthening, advocacy, aligning incentives



Innovation Lab Role in Scaling Technologies

- Innovation Labs cannot be responsible for actual scale out. Mission projects, national extension systems, local ngos, and the private sector accomplish scale out
- Innovation Lab research products have to be better designed to ensure “use”. Research product “use” takes place when coupled with “user demand” during the research process itself.... *RIU*
- The Labs must have some level of responsibility to facilitate or assist with the scale out – i.e., work at the interface of technology finalization and scale out for the “early adopters”
- **MUST SOMEHOW TWEAK OUR RESEARCH INVESTMENTS SO THAT TECHNOLOGIES WITH THE HIGHEST POTENTIAL FOR WIDESCLE ADOPTION RECEIVE FOCUS.... *NOT EASY!!***



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

Horticulture

SANREM



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HORTICULTURE: CAMBODIA





- 27 in every 100 children (6-10 years old) or about 2.5 million school children are underweight for age;

- 37 in every 100 children or about 3.4 million school children are stunted or short for their age and anemic



Pilot school garden project: 8000+ schools now reached by 2010
(Courtesy AVRDC)



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

