Science of Scaling

Dr. Marc Schut (m.schut@cgiar.org)
Achieving SDGs requires impact at scale

**REACHING MILLIONS:**
**The science of scaling**

**Special Invitation**

Against the backdrop of the World Food Prize 2018, the premier conference in the world on global agriculture, we invite you to join our panel of experts for a conversation on the transformational solutions which are required to deal with today's global challenges.

**Date and Time:** October 17, 2018 from 10:30 to 11:30 AM at Downtown Des Moines Marriott, Dubuque Room

**Panel of experts:**
- Opening and moderator: Marco Ferroni, Chair, CGIAR System Management Board
- Speakers:
  - Maria Andrade, 2016 World Food Prize Laureate; Country Manager and Senior Sweetpotato Breeder for sub-Saharan Africa and Asia, International Potato Center (CIP)
  - Neel Gutierrez, Chief Technology Officer, Corteva Agriscience
  - Mark Schut, Senior Scientist and Country Representative for Rwanda, International Institute of Tropical Agriculture (IITA)

**Spaces are limited. Please RSVP to v.prats@cgiar.org**

www.cgiar.org  PCGARIWFP  www.worldfoodprize.org

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**Scaling Up NUTRITION**

**ENGAGE • INSPIRE • INVEST**

**Scale Up: A Necessity for Transformative Development**

**KEYNOTE SPEAKER**

**Dr. Akinwumi Adesina**

President, African Development Bank

**Tuesday, 25 September 2018 | 4:00pm**

Laeb Playhouse

IDEAS FESTIVAL

150 YEARS OF GIANT LEAPS

THE UNIVERSITY
Scaling the old way

1. End of project or program
2. No resources allocated
3. Limited insights in the needs of public and private scaling partners
4. Unrealistic ideas about impact (from unproven idea to reaching 2M farmers in 3 years)
5. One size fits all approach in terms of strategies and partnerships
6. No scaling experts involved

Resulting in disappointing results and impacts
Science of scaling: connecting the pathways of agricultural research and development for improved food, income and nutrition security

Edited by Marc Schut, Cees Leeuvis, Graham Thiele
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Science of Scaling: Understanding and guiding the scaling of innovation for societal outcomes

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Science of Scaling: The design, testing, validation and use of scientific theories, concepts and methods to understand and guide scaling of innovation to achieve societal outcomes.

### Table 2
Overview of Special Issue publications and their categorisation.

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<tr>
<th>#</th>
<th>Publication</th>
<th>Category</th>
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L1. Innovations scale as part of packages

- Such packages are context specific
- Such packages consists of technological and non-technological innovations
- Innovations often have different levels of readiness and use
L2. Numbers are only part of the story?

Fetish for numbers creates wrong incentives

I don’t like the taste and there is no market, but anyway…

I’ll give you USD 10 if you adopt this new variety

Donor Report 2019

250,000 farmers adopted our new variety!!

Fetish for numbers creates wrong incentives
• Projects should focus on overcoming bottlenecks that can trigger systemic change and impact at scale
• R4D scaling projects do not need to achieve the numbers if they contribute to overcoming bottlenecks for innovation use by next- or end-users
• Context-specific theory of change focused on increasing scaling readiness of innovations
• New competencies required (scaling champions ≠ scientist)
• New institutional arrangements and conditions (e.g. flexibility, truly demand-driven approach)
• New partnership models (co-investment with scaling partners)
• Who’s in the driving seat? Role of negotiation.
• Scaling is not neutral, it requires downscaling of current dominant innovations, incumbent systems that have sunk investments
• New forms of MEL to make ‘tough’ decisions
L5. Letting it go...

- Limited control over (ab)use of innovation at scale
- Implications for responsible scaling
Partnerships (models) need to be fit-for-purpose!
L7. A new paradigm: Scaling outcomes

Wave 1: Transfer of Technologies

Wave 2: Scaling of Innovations

Wave 3: Scaling Outcomes
Wave 1: Transfer of Technology

Proven Technology Location A
(improved chicken breed)

Extension mechanism
(extension provision and ToT)

Location B  Location C  Location D

Outcome
(improved nutrition)
Proven innovation package Location A
(improved chicken breed + credit + market)

Wave 2: Scaling of innovation

Location B
Strategy B (breed)

Location C
Strategy C (credit)

Location D
Strategy D (market)

Outcome
(Improved nutrition)
Wave 3: Scaling outcomes

Desired outcome at scale
(Improved nutrition)

Location A
- Innovation X
  - (Imp chicken breed)
  - Scaling Strategy A
    (site-specific package, bottleneck, partnership)

Location B
- Innovation Y
  - (Orange Fleshed SP)
  - Scaling Strategy B
    (site-specific package, bottleneck, partnership)

Location C
- Innovation Z
  - (Vit A supplement)
  - Scaling Strategy C
    (site-specific package, bottleneck, partnership)
Research agenda for Science of Scaling

THEORY ORIENTED

RESEARCH DOMAIN 1
Understand the big picture of scaling innovation
Theory formation based on ex-post analyses of innovation and scaling histories

RESEARCH DOMAIN 2
Develop instruments that nurture efficient and responsible scaling
Approaches, concepts and tools to support ex-ante design of evidence-based scaling strategies

RESEARCH DOMAIN 3
Create a conducive environment for scaling innovation
Institutional arrangements, partnership models, and monitoring and learning mechanisms

ACTION ORIENTED
Thank you so much!

Scaling Readiness
An Approach to Assess and Accelerate Scaling of Innovations.

www.scalingreadiness.org