# SC/LE conference

Innovations in Agriculture: Scaling Up to Reach Millions

#### **INCLUDED:**

**USAID/MSI** (United States Agency for International Development/Management Systems International)

- > Agricultural Scalability Assessment Tool (ASAT)
  - Step 1: Decision tree
  - Step 2: Evaluate scalability using a worksheet/matrix
  - Detailed ASAT criteria

PPP Lab Food & Water and CIMMYT (International Maize and Wheat Improvement Center)

> The Scaling Scan – A practical tool to determine strengths and weaknesses of a scaling ambition

IFAD (International Fund for Agricultural Development)

- > Questions on scaling up to be considered when designing an IFAD project to reach greater impact
- > The phases of scaling up

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ASSESS MENT TOOLS AND MEWORKS

EA/EO

# Agricultural Scalability Assessment Tool • Step 1: Decision Tree



USAID, Guide to the Agricultural Scalability Assessment Tool: For Assessing and Improving the Scaling Potential of Agricultural Technologies, pp. 49. Available at https://pdf.usaid.gov/pdf\_docs/PA00T6KX.pdf

Ļ	DETAILED QUESTIONS FOR DETERMINING THE APPROPRIATE SCALING PATHWAY
	Tasks
I	<ol> <li>Who has the resources<sup>1</sup>, technical knowledge, and incentives<sup>2</sup> to take overall responsibility for driving the scaling up process and coordinating among various actors?</li> </ol>
	2. In its current form, <b>are target adopters (producers) likely to be willing and able<sup>3</sup> to pay</b> for the innovation and any associated additional inputs or investments? I.e. is there likely to be a market for the innovation given the business case for adopters?
	3. Who has the resources, technical knowledge and incentives <b>to simplify, modify or adapt the innovation, or bundle with other products and services</b> , to improve the ease of adoption and cost/benefits i.e. improve scalability?
	4. If necessary for this innovation who has the resources, technical knowledge and incentives <b>to drive financial innovation or mobilize and</b> make available affordable financing for adopters? Provide subsidies or price discounts for initial adopters?
	<ol> <li>Who has the resources, technical knowledge and incentives to produce, import or otherwise ensure supply of any upstream inputs for the innovation? To increase the quantity produced as scaling proceeds? Be responsive to changes in market demand if there is a product mix?</li> </ol>
	6. Who has the resources, technical knowledge and incentives to produce, import or otherwise ensure supply of <b>the innovation itself</b> . To increase the quantity produced as scaling proceeds? Be responsive to changes in market demand if there is a product mix?
	7. Who has the resources, technical knowledge and incentives to produce, import or otherwise ensure supply of any <b>complementary inputs or services</b> (e.g., phytosanitary, financial, veterinary)? To increase the quantity produced as scaling proceeds?
	8. Who has the resources, technical knowledge, incentives and geographic coverage to distribute, market and/or sell <sup>4</sup> the innovation and any necessary complementary inputs or services? How does the existing coverage of the distribution network compare with achieving close to 100 percent scale of the target locations and populations? To increase the quantity produced as scaling proceeds?
	9. Who has the resources, technical knowledge and incentives to <b>create demand for the innovation?</b> At what stage of scaling could fulfilling this role shift?
	10. Who has the resources, technical knowledge, incentives and geographic coverage to <b>provide training, technical assistance and</b> <b>extensions support</b> in the proper use of the innovation?
	11. Who has the resources, technical knowledge, incentives and linkages <b>to process, market and sell</b> any expected increase in (or different kind of) output resulting from widespread adoption of the innovation?
	12. Who has the resources, technical knowledge, incentives and linkages <b>to develop a market and education consumers</b> for any different kind of output resulting from widespread adoption of the innovation?
	<ol> <li>Resources include human, financial, infrastructure and equipment.</li> <li>Incentives refer broadly to the business case for the private sector (risk and return), the policy priorities and bureaucratic motivation for a public-sector agency, and the vision, mission, and policy priorities for an NGO.</li> <li>"Able to pay" means the innovation's price point would be affordable for adopters given their resources, or some form of financing available.</li> </ol>
	4 Distributing, marketing, and selling are combined here but each could be provided by different actors.

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USAID, Guide to the Agricultural Scalability Assessment Tool: For Assessing and Improving the Scaling Potential of Agricultural Technologies, pp. 17, Table 3. Available at: <u>https://pdf.usaid.gov/pdf\_docs/PA00T6KX.pdf</u>

Agricultural Scalability Assessment Tool
<ul> <li>Step 2: Evaluate scalability using a worksheet/matrix</li> </ul>
Criteria
Group A: Importance of the Issue the Innovation Addresses
Group B: Credibility and Observability of the Innovation with Key Stakeholders and Adopters
Group C: Ease with which the Innovation can be Tried, Purchased, Adopted, and Implemented Effectively by Producers or the Target Adopter
Group D: Potential Benefits or Business Case for Potential Adopters
Group E. Business Case for Value-Chain Actors and Strength of the Overall Market System (for Commercial Pathways)
Group F: Public-Sector Enabling Environment Supports Commercial Pathways
<b>Now on the DEC:</b> GUIDE TO THE AGRICULTURAL SCALABILITY ASSESSMENT TOOL Management Systems International – Richard Kohl and Colm Foy
https://pdf.usaid.gov/pdf_docs/PA00T6KX.pdf
2 The U.S. Government's Global Hunger & Food Security Initiative

#### **Detailed ASAT Criteria**

	Scaling Factor
А.	Importance of the Issue the Innovation Addresses
A.I	Does the innovation sustainably address at least one important development objective, such as improving food security, resiliency or nutrition, or reducing poverty or stunting?
<b>A.</b> 2	Does the innovation potentially benefit a high percentage of producers or a large absolute number of producers across multiple locations?
A.3	Does the innovation address an important cross-cutting issue (e.g., gender, climate change, natural resources, etc.)?
В.	Credibility and Observability of the Innovation with Key Stakeholders and Adopters
B.I	Does the innovation address a felt (subjective) need that is important to potential adopters (e.g., identified in previous or new needs assessments)?
B.2	Are impact estimates (benefits) of the innovation based on sound, credible, scientific evidence? Has the innovation been shown to be effective when used by actual adopters under real conditions?
B.3	Is the innovation's effectiveness considered superior to those of current solutions and emerging alternatives?
<b>B.4</b>	Is the innovation supported by key or influential individuals and institutions?
B.5	Is the innovation's impact tangible and easily observable to potential adopters? Is the impact easily associated with the intervention?
<b>B.6</b>	Is the innovation likely to face opposition from vested interests in the private value chain or from public sector actors that could impede scaling?
C.	Ease with which the Innovation can be Tried, Purchased, Adopted, and Implemented Effectively by Producers or the Target Adopter
C.I	Is the innovation package simple (with few components), or does it replace a similar (potentially complicated) technology?
C.2	Is the training and extension support for the innovation needed or can it be done with little time, intensity, and resources?
C.3	Is adoption aligned with the existing socio-cultural norms or behaviors of the target areas or population?
C.4	Does the innovation use existing practices and equipment? Is investment in new equipment or infrastructure required?
C.5	Can the innovation be tried by potential adopters at small scale with minimal investment?

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D.	Potential Benefits or Business Case for Potential Adopters
D.I	Can producers expect significant increases in production or reduced losses if they adopt the innovation?
D.2	Will producers who adopt the innovation experience significant intangible benefits (e.g., time savings, increased ease of use)?
D.3	Do the benefits of adopting the innovation translate into an increased, marketable surplus or other increased capacity to (re)pay the cost of the innovation?
D.4	Is the TOTAL COST (including complementary inputs and new investment) of adopting the innovation at an economically-efficient scale affordable? Is it roughly the same as the technologies and practices it replaces?
D.5	Can the innovation be used for multiple purposes (crop/livestock types and seasons) that increase its value (thereby, diversifying benefits)?
D.6	Are the expected financial benefits of the innovation associated with low risks (i.e., have a low variance) when well implemented?
D.7	Are the impact and returns of the innovation relatively high (robust, resilient) even in the face of (many, if not all) adverse external events (e.g., weather, disease or pests)?
D.8	Are the impact and economic returns of the innovation high (robust, resilient) when only some components of the innovation package are adopted, or when components are not well implemented?
D.9	Is there any risk that producers who adopt the innovation end up with counterfeit or poor-quality versions of the innovation that would lead to poor results?
D.10	Does the innovation require annual or regular purchases to maintain effectiveness or vigor?
E.	Business Case for Value-Chain Actors and Strength of the Overall Market System (for Commercial Pathways)
E.I	Is the ownership or licensing of relevant intellectual property rights in place to allow sufficient supply?
E.2	Is last-mile delivery in place for the innovation and other complementary inputs, especially in more remote and marginalized areas?
E.3	Do downstream actors with the incentives (business case), capacity, and resources to buy/process/absorb any increased output exist?
E.4	Are private sector services (spare parts, repairs, veterinary services, machinery services) that, potentially, will be needed by innovation adopters in place, generally available, and of appropriate quality?
E.5	Is there sufficient potential or unmet market demand to absorb increased production without adversely affecting output prices (e.g., the possibility of import substitution or rapidly growing domestic demand)?
E.6	The target countries, demographics, and settings (agroecological conditions, socio-cultural, economy, politics, etc.) of individual adopters are largely homogeneous, so the scaling strategy or innovation itself does not have to be adapted or modified.
F.	Public-Sector Enabling Environment Supports Commercial Pathways
F.I	Does the innovation address an issue that is high on the national or relevant local policy/public sector agendas in the target areas?
F.2	Do public sector financial incentives exist or are likely to be easily put in place with minimal advocacy to improve the business case for producers, value chain actors, or both?
F.3	Are regulatory approvals (including registrations, licenses, and authorization) for the innovation in place or will be soon?
F.4	Does increased production/output require new standards (public, private, or other), enforcement, or sophisticated consumers?
F.5	Are public services relevant to the ongoing utilization of the innovation (extension support, certification, quality control, and enforcement of regulations) of good quality and widely available?
F.6	Is the public sector able to supply key inputs (e.g., breeder or foundation seeds) to the value chain in sufficient quantities to keep pace with scaling?
F.7	Is complementary public-sector infrastructure (roads, irrigation, ICT networks, etc.) in place, of quality, and at sufficient scale to fulfill long-term scaling potential?

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# PPP LAB FOOD & WATER

## The Scaling Scan

#### A practical tool to determine strengths and weaknesses of a scaling ambition

Despite the omnipresent focus on "scaling", its interpretation diverges a lot between and within projects. The Scaling Scan was designed to systematically deal with the complexities of scaling and tailor scaling approaches to specific contexts. Through a self-assessment tool, researchers and project leaders are able to formulate a realistic and responsible scaling ambition by identifying the challenges and opportunities that need to be addressed in order to achieve the scaling ambition.

#### **Principles:**

- Scaling should be regarded as a combination of three important dimensions: impact that benefits many people, impact that stays (sustainability) and responsible system change\*.
- Successful scaling of technological innovations requires that at least as much attention is paid to the complementary non-technological requirements.
- Keep it simple.

**For whom?** Project coordinators, managers, technical experts, implementers, anyone looking to scale impact - individually or in teams.

#### How?

The Scaling Scan provokes discussions that are best addressed in a moderated workshop setting. Users can answer tactical questions in the workbook, and an Excel sheet can be uploaded on GoogleSheets to compile results from multiple users automatically.

Users are guided through three steps:

**Step 1:** Construct your scaling ambition: a clear idea of what impact would look like, who is involved and why it is important.





#### **Step 3a:** List points of attention for implementation **Step 3b:** Identify and deal with challenges and opportunities



Finally, are you confident enough that you will reach your scaling ambition?

- YES, overcoming the key challenges should be at the core of your implementation strategy.
- MAYBE, review your scaling ambition and/or check if you can benefit from more specialized tools presented per scaling ingredient in the Annex of the Scaling Scan tool.
- **NO**, review your scaling ambition so that it fits the human and financial resources, context and landscape for collaboration.

#### More info: https://ppplab. org/2017/11/3223/

or https://www.cimmyt.org/

scaling-scan-a-simple-toolfor-big-impact.

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### Questions on scaling up to be considered when designing an IFAD project to reach greater impact

#### **Vision**

- What is to be scaled up? Are the lessons learned from previous interventions sufficiently rigorous to justify bringing them to scale?
- 2. If a project is innovating/testing a new model/approach, to what extent has the project identified the areas and approaches for accumulating knowledge during implementation in order to guide future decisions on scaling up?
- 3. What is the appropriate ultimate scale of the intervention the IFAD project or programme supports in the country? In other words, how many people, households, districts, etc., could and should ultimately be reached? What will be the economic impact?
- 4. Where will sustainability come from in the future and what is the rationale in the choice of the key partners?
- 5. To what extent is a scaling-up approach able to maintain selectivity and simplicity in project design? Is the project avoiding the risk of adding complexity while scaling up?

#### Pathways

- 1. What is the likelihood that the key drivers of the scaling-up process will be able to lead and sustain the efforts beyond the project?
- 2. Are the economic and financial benefits sufficiently attractive to drive expansion and sustain the initiative in the long term?
- 3. Has the project identified the right "spaces" that will permit the intervention to grow to the desired scale? Is the project sufficiently integrating policy engagement and knowledge to open the necessary spaces?
- 4. Is the government providing the required fiscal space to sustain project financing?
- 5. Are actions likely to be coordinated with partners and the momentum maintained?

#### Managing the process

- 1. Are there adequate procedures for documenting the progress, lessons learned and impacts of the scaling-up effort?
- 2. Does the project's M&E system track whether the scaling-up process is moving in the right direction, as identified at the design stage?
- 3. How will the information generated by M&E be fed back to key stakeholders and the broader public, and used to make necessary course corrections?
- 4. Have obstacles and risks been identified and addressed through mitigation measures?



# The phases of scaling up



\*Public-private producers' partnerships