

An Evidence-based Strategy and Learning Approach to Climate Smart Innovation in Thailand Agricultural Value Chains

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Context: USDA Thailand RAIN project

- 5-year project aiming to identify and scale 30 CSAIs for 7 value chains
- Implemented by Winrock International with:
 - Kasetsart University
 - MSU
 - Mekong Institute
 - National Science and Technology Development Agency of Thailand
- KU and MSU role is to provide evidence to inform CSAI selection and scaling strategies
- RAIN = Regional Agricultural Innovation Network to promote regional spillovers / spill-ins





Thailand RAIN project approach

SOURCE

1. Prioritize needs
2. Search for CSAI
3. Assess tech and market readiness
4. Define Business Model hypothesis

SUPPORT

1. Identify support needs
2. Pilot Business Model
3. Collect feedback
4. Decide Go/No-Go

SCALE

1. Engage others
2. Define capacity needs
3. Select incentives
4. Design facilitation activities

What do we need to know to evaluate a CSAI?

- Definition of what the “core technology” is intended to do
 - What problem or challenge is being solved for which VC stakeholder(s) ?
 - What is the level of urgency to find the solution ?
 - What are the dimensions of the problem being solved (potential number of users / scale of production affected) ?
 - How does the technology work ?
 - What is unique / potentially better than other alternatives ?
- Data on performance
 - Technical parameters when technology is applied compared to alternatives
 - Socio-economic cost-benefit analysis and social – private profitability gap
 - Perceptions of potential value chain users compared to scientists

Key lesson: technology evaluation requires multi-disciplinary expertise

Is there a feasible business model to scale a CSAI?

- Who is the technology user(s) and what information do they need when?
 - Input manufacturer, farmer, mechanization service provider, drone operator, processor, wholesale or retail distributor (value chain perspective helpful)
- Where will the user(s) access the technology and the information?
 - Is access equitable (gender, youth, regions)
- Are the benefits and costs apparent to the user(s)?
- Are the benefits and costs apparent to upstream suppliers and downstream product users? What innovations can resolve the motivation gap?
- Do they face barriers in terms of regulations or financial access?
- Do technical resources exist to adapt the technology / package to local conditions?

Key lesson: scaling design requires a multi-stakeholder perspective

Emerging lessons on CSAI scaling potential

- Bring private sector actors into the process at the beginning
- Evaluate incentives facing users along the VC early in the process
- Financial and social cost-benefit analysis to assess “profitability gaps” for VC stakeholders
- Assess scaling needs early in the process -> business model
- Make CSI evaluation data easily accessible to capture knowledge spillovers
- Ensure a sustainable public good model for maintaining a “knowledge hub”