



## Goldilocks Case Study: One Acre Fund: Theory of Change for the Adoption of New Technologies

### One Acre Fund: Theory of Change for the Adoption of New Technologies

Over the last decade, agricultural productivity of smallholder farmers throughout Africa has remained stagnant – often constrained by lack of access to improved agricultural technologies and well-functioning markets. One Acre Fund is an East Africa-based NGO that seeks to address barriers to improved agricultural productivity of smallholder farmers and to reduce poverty. Its core program offers farmers a set of services and agricultural inputs that include financing, agricultural training (extension services), and post-harvest storage. The organization currently serves approximately 280,000 farmers in Kenya, Rwanda, Burundi, and Tanzania and aims to reach one million farmers by 2020.

One Acre Fund's measurement approach focuses on activity tracking and monitoring to assess how their model works in practice. This tracking data is used to improve the program and to scale it to new areas. The organization enhances the credibility of their impact analyses through the routine use of comparison groups to estimate its impact on farmers, rather than relying on before-and-after measurement. One Acre Fund works to ensure the

credibility of the data it gathers, for example, measuring harvest output by weighing crops rather than relying on self-reported data.

The organization has experimented with a variety of methods to build credible comparison groups for its impact analysis. It is transparent about the strengths and weaknesses of its preferred approach, publishing its experience with different methods on the organization's website.

In this case study, we highlight One Acre Fund's experience measuring impact and engaging in actionable monitoring and testing to learn which products and services to add to the One Acre Fund bundle. We recommend that One Acre Fund continue to refine its theory of change and M&E strategy to include more information on the costs and benefits to farms, as well as the assumptions and risks of their model.

## **Lessons for Others**

### **1. Be explicit about theory of change assumptions and risks.**

When developing a theory of change, organizations should be explicit about the underlying assumptions, risks, and potential unintended consequences of the program. Participation in a program often triggers or requires a change in behavior or practices that can lead to unexpected tradeoffs or unanticipated consequences. Therefore, a program's theory of change should consider up front how these potential tradeoffs could affect the welfare of beneficiaries and their families.

### **2. Prioritize the collection of credible data.**

Ensuring data credibility is often not a priority for organizations, especially when compared to measuring impact. However, credible data is critical for an actionable and responsible M&E system. Investing resources to ensure that the data are accurate and valid—that they accurately capture what one is seeking to measure—is crucial. Sometimes this means avoiding shortcuts that result in poor data quality and investing additional resources in accurate measurement, especially for programs where outcomes are notoriously difficult to measure, such as incomes and agricultural yields.

### **3. Consider conducting one good RCT rather than multiple quasi- or nonexperimental studies.**

Conducting large-scale RCTs can often be logistically challenging and daunting. Various quasi-experimental and nonexperimental impact evaluation methods offer an alternative but they have less credibility than RCTs and are just as expensive to implement. Instead of investing resources in quasi-experimental evaluations with weak credibility, it may be worthwhile for an organization to invest in one well-designed rigorous impact evaluation that will produce credible evidence on program effectiveness.

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