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Issue Brief

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Principles into Practice: Impact Evaluations of Agriculture Projects

In Principle: Impact Evaluations of Agriculture Projects

The U.S. Government is committed to learning what works to reduce poverty and increase food security through agriculture investments. There are many tools for learning from program experience. However, impact evaluations are central to a learning agenda that moves beyond business-as-usual assumptions about what works. There is no more rigorous tool than impact evaluation to answer difficult questions such as: Did we achieve the impact we intended? Did we make the right assumptions about how project interventions would translate into poverty reduction? What is the impact of our investment as compared to what would have happened without it? What impacts are directly attributable to this investment, and not to other factors? In other words, what can the investment really take credit for? Did the benefits of this investment outweigh the costs? What can we learn from what went right and what went wrong? When impact evaluations are rigorous and independent, and coupled with a commitment to transparency, they are a powerful tool for accountability, learning and making investments based on evidence about what works.

This paper describes why learning through impact evaluation matters and describes both challenges and lessons to getting it right in the agriculture sector. The lessons in this paper are based primarily on MCC's experience—with a focus on program and evaluation *implementation* rather than impact evaluation *findings*. The lessons reflect joint learning between MCC and USAID.

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PRINCIPLES *into* **PRACTICE**

MCC was founded with a focused mandate to reduce poverty through economic growth. MCC's model is based on a set of core principles essential for development to take place and for development assistance to be effective—good governance, country ownership, focus on results, and transparency.

The *MCC Principles into Practice* series offers a frank look at what it takes to make these principles operational. The experiences captured in this series will inform MCC's ongoing efforts to refine and strengthen its own model. In implementation of the U.S. Global Development Policy, which emphasizes many of the principles at the core of MCC's model, MCC hopes this series will allow others to benefit from and build on MCC's lessons.

The series also offers insights into MCC's experience with the technical and operational approaches it uses to support poverty reduction through economic growth. The full *Principles into Practice* series is available at www.mcc.gov/principlesintopractice.

The paper on which this brief is based reflects a collaborative effort between the Millennium Challenge Corporation and the U.S. Agency for International Development's Bureau of Food Security, both of which have made strong commitments to impact evaluation in the agriculture sector. The learning reflected in this paper directly contributes to Feed the Future, the U.S. Government's global hunger and food security initiative.

In Practice: Impact Evaluations of Agriculture Projects

MCC has made public commitments to rigorous learning through impact evaluation. MCC has about a dozen impact evaluations underway in agriculture and rural development projects across its compact portfolio designed to measure changes in farming practices, agriculture productivity, sales, farm and household income, and consumption that are attributable to MCC investments. MCC also has almost 100 independent evaluations across other sectors, over a third of which are rigorous impact evaluations.

USAID has recently renewed its commitment to rigorous evaluation and, in the context of Feed the Future, plans to implement 20 impact evaluations over the next five years to contribute to the body of knowledge on food security. Data and findings from those evaluations will be incorporated into the programming cycle as they become available to improve the design and management of interventions in the agriculture and nutrition sectors.

Both MCC's and USAID's evaluation policies highlight principles of independence, learning, accountability, and transparency, and both use a combination of impact and performance evaluations (see Box 1). Both are based on the understanding that development work is filled with challenges and resources are scarce. Not all interventions will achieve their intended aims, but it is essential to know what has and has not worked so that future investment decisions can be based on this evidence. It is in this spirit that MCC and USAID are working together to improve accountability and learning through impact evaluation in the agriculture sector.

Several factors make evaluation in the agriculture sector especially challenging. For example, crop cycles and seasonality make the timing of evaluation surveys critical, and spillover or demonstration effects might be desirable for impact, but hard to measure in evaluation. Agriculture implementation approaches can evolve significantly over the course of a project in response to changing market conditions or more detailed implementation planning. This can create tradeoffs between adjusting implementation approaches based on experience and adhering to an evaluation approach to maximize learning what works and accountability for results. Requiring a control group that is comparable to the target population can reduce the overall reach and scope of projects if donors have the ability to reach all potential beneficiaries. Likewise, randomized selection of communities or beneficiaries may be politically challenging for program implementers or country counterparts who have to explain why some potential beneficiaries will not be able to participate in the program. Finally, program implementers often make strong assumptions about what works and what does not work, and are therefore more focused on doing the interventions than learning more about if and how they work.

Combined, these factors can make implementers, partner countries and sector specialists hesitant about rigorous impact evaluation. This issue brief summarizes the full Principles into Practice paper, which is based on a frank acknowledgement that these challenges exist and on a desire to develop practical solutions for managing impact evaluations in this context.

Five lessons on putting impact evaluation in agriculture into practice

While these challenges are real and can be difficult to manage, they should not prevent the pursuit of rigorous impact evaluation in the agriculture sector. Given the critical role of agriculture for development, and tightening development budgets globally, it is essential that the development community deepen its understanding about what approaches work best to reach desired outcomes in a cost-effective way.

Lesson 1: Define early the program logic and objectives of the evaluation, and how to integrate the two.

The most important first step—both for successful implementation and evaluation—is to have a clear picture of what a program aims to achieve and how and when planned interventions are expected to lead to that outcome. This program logic, or theory of change, is the starting point for designing both the implementation approach and its evaluation. It is important to define up front the essential components of the program logic and do everything possible to keep those essential components in place during implementation.

Once the program logic is clearly defined and understood, several considerations can help integrate the implementation and evaluation so that both are manageable and can maximize impact and learning. Ideally, evaluations should be designed not only to measure final intended impact but also to track changes in the causal pathway, focusing on the points that are evaluable and where the learning potential is greatest to understand which components of the interventions drive change and why. It is important to think carefully about scale and complexity. Many agriculture development projects are multi-faceted, large scale projects with many integrated activities that can be hard both to implement and to evaluate. Sequencing issues and delays between activities can often lead to significant impacts on program logic, timing of evaluations and ability to communicate results. *See the full paper for an example from Moldova.*

Lesson 2: Engage early and communicate often.

Coordinated planning and ongoing communication are the essential ingredients for minimizing and managing tradeoffs between implementation approaches and evaluation methodologies. Building a culture of partnership, mutual respect and open dialogue among parties through early engagement and ongoing communication is a critical factor of successful impact evaluations. Early engagement lays the foundation for establishing a strong professional relationship and fosters a deeper understanding of the implementation approach as well as the impact evaluation design methodology. Including implementers in the process of developing an evaluation approach enables evaluators to harness the knowledge of implementers and forms a stronger and enduring partnership. In fact, the more implementers and evaluators understand each other's methods, and communicate regularly, the more likely they are to collaborate in managing tradeoffs during implementation. It is common for agriculture project approaches to change and evolve in response to changing local and market conditions or to monitoring information gathered during implementation. It is important to acknowledge that these changes may occur and explicitly plan

to discuss their impact on evaluation methodologies *before* decisions are made about changing implementation approaches. *See the full paper for examples from Armenia, Burkina Faso and Nicaragua.*

Lesson 3: **Foster joint ownership by aligning incentives.**

To strike a healthy balance between achieving impact, measuring results and learning what works in agriculture investments, everyone involved must feel ownership over program implementation and evaluation. This means incentives must be aligned for donors/sponsors, partner countries, project implementers, and evaluators. As a starting point, the onus is on the donor, in collaboration with partner countries, to clearly set expectations for both implementers and evaluators and hold them accountable to these expectations. Aligning incentives also entails planning together and getting right the timing and content of requests for proposals (RFPs) and contracts.

Whenever possible, the design of project and evaluation plans should include both implementers and evaluators. RFPs for both implementers and evaluators should include clear expectations for joint planning and ongoing collaboration to manage tradeoffs between implementation approaches and evaluation methodology. Project implementer RFPs should include as much information as possible about potential evaluation methodologies and can invite bidders to articulate how these methods may affect project design in order to demonstrate an understanding and commitment to rigorous evaluation whenever possible or appropriate. RFPs could also request input from bidders on what they would like to learn from the impact evaluation so that it can be tailored to address their learning needs. In order to best address and anticipate the challenges in impact evaluations in the agriculture sector, signing of implementer and evaluator contracts should coincide to maximize opportunities for joint planning.

Building in time for joint planning, designing implementation approaches to accommodate evaluation methodologies and staffing evaluation teams with sector expertise all have implications for costs and level of effort. Impact evaluations themselves can be costly. Donors should be honest about these implications and make conscious decisions about the value for money of the learning that evaluations will yield. *See the full paper for examples from Honduras and Moldova, and a checklist for RFPs and contracts.*

Lesson 4: **Match evaluation methodology and program design.**

The most rigorous method for measuring attributable project impacts and for learning is through randomized control trials (RCTs). Because RCTs identify similar groups of individuals (control groups) that will and will not be exposed to project interventions, evaluators can compare the groups to measure their impacts, potentially over a long period of time. This use of a statistically identical control group creates the greatest opportunity for learning what works and for measuring project impacts, including those that accrue over time. Therefore, it is often useful to start by exploring whether an RCT is a good fit for a proposed project.

When it is not acceptable or possible to exclude control groups from program exposure over an extended evaluation period, another kind of RCT--randomized rollout--may be an alternative. However, MCC is learning that this methodology has significant vulnerabilities in farmer training programs. Randomized

rollouts generally offer project interventions to the control group a year or two after the first treatment group. This allows for a very short period to compare the differences in change between the two groups, which can be further limited by delays in project start-up. This approach risks underestimating the impact of project interventions because it simply does not allow enough time for benefits to accrue. This is particularly limiting for agriculture projects with a gestational period of multiple years before the primary benefits can be observed. And even projects with short gestations often will benefit from payback periods that accrue over many years.

Even when a RCT is not a suitable methodology, there are other methodologies to measure project impact that may be appropriate. These quasi-experimental approaches have well-defined limitations but, when appropriate, are useful and practical alternatives that provide critical learning opportunities if randomization is not possible. It is essential that evaluators, implementers, partner countries, and donors convene as early as possible to identify what they seek to achieve and to learn what evaluation methodology is the best fit, given that a cost-effective solution typically requires a range of adaptations by all parties. Such discussions are also valuable for designing impact evaluations to address questions that donors, partner countries or implementers are particularly interested in learning about. *See the full paper for examples from Georgia, Mongolia and Morocco, and a more thorough discussion of alternative methods.*

Lesson 5: **Focus on long-term impacts but be prepared to show early results.**

Impact evaluations are generally intended to learn about long-term program benefits. Consequently, post implementation surveys should be designed to reflect the lags in impacts implied by the program logic and estimate the impacts of completed projects, requiring that they are often carried out for multiple years after project completion. That said, stakeholders naturally demand results as soon as projects end. It is essential to message to key stakeholders that donors and implementers may not have data about impacts attributable to project interventions immediately upon project completion. With good monitoring and evaluation (M&E) systems, information about outputs and early outcomes should be available, but impact evaluations generally yield information about intermediate and ultimate outcomes, such as farm and household income or consumer expenditure improvements, that may accrue several years after project completion.

Even with excellent messaging about what you will know when, there will be inevitable pressure to report outcome information quickly. This may tempt donors, partner countries or implementers to push evaluators to conduct endline surveys earlier than planned. While this will yield some data more quickly, it will probably not give project interventions sufficient time to take hold and create the change donors and partner countries set out to achieve. Therefore, by rushing to measure results, one risks under or over-estimating project impact.

Looking Ahead

The U.S. Government is committed to implementing impact evaluations of development programs for purposes of strengthening accountability to stakeholders and to foster learning that will improve the effectiveness of future investments. Development projects and investments such as those supporting agriculture and food security represent an opportunity to deliver on this commitment.

A focus on learning: MCC has been a leader of rigorous impact evaluation since its inception in 2004 and now has an extensive pipeline of impact evaluations associated with its investments in agriculture and rural development. MCC released a first set of agriculture-related impact evaluations, and related lessons learned, in October 2012 (see www.mcc.gov/impacteval). The Feed the Future learning agenda includes a set of strategic questions under each theme for which Feed the Future and its implementers intend to produce evidence, findings and answers through impact evaluations and other methods, such as performance evaluations and policy analysis.

Courage to be transparent: In the spirit of learning and accountability, both MCC and USAID will publish the findings of their evaluations, even when they reveal that the agencies and partner countries have fallen short of program targets or when interventions have been less cost-effective than expected. There is risk associated with this because it will be easier than ever to point to development investments that have not worked well. However, with independent and transparent evaluation in place, it will also be easier to have confidence in claims of successful impact.

See the full paper at:

<http://www.mcc.gov/pages/results/principlesintopractice>