



THE INITIATIVE FOR SMALLHOLDER FINANCE

**BRIEFING 03**

**SMALLHOLDER IMPACT  
AND RISK METRICS:  
A LABYRINTH OF  
OPPORTUNITY**

.....  
*March 27, 2014*

## SMALLHOLDER IMPACT AND RISK METRICS: A LABYRINTH OF OPPORTUNITY

The current gap between supply of and demand for smallholder agricultural finance is over \$400 billion.<sup>1</sup> One of the reasons this finance gap persists is that investors lack sufficient data about the benefits and risks of directing their funds to smallholder agricultural finance. Without this information, investors have little evidence about and therefore little understanding of how to provide smallholder agricultural markets with the finance they need.

Organizations and initiatives have sought to address this by developing and testing business models to serve smallholder agricultural markets, but no one has compiled the evidence from these efforts in a meaningful way. A number of innovative and promising new impact and risk measurement tools have emerged, but it is challenging to understand their varying functions and how they fit together.

In light of this situation, the Initiative for Smallholder Finance has taken stock of the existing landscape of smallholder impact and risk measurement and devised tools and suggestions to align these efforts for greater future impact.

### ABOUT THIS BRIEFING

*This briefing is the third in a series by the **Initiative for Smallholder Finance**, a multi-donor effort designed to demonstrate how specific products and services can expand the reach of financing for smallholder farmers. Initiative activities include targeted market research, product development and testing, and investment facilitation in the smallholder finance market.*

## New Tools for Metrics Collaboration

To add clarity to the smallholder metrics space and set the stage for increased collaboration, the Initiative has created:

1. A universal smallholder theory of change
2. A smallholder impact literature wiki
3. A landscape of smallholder impact and risk assessment tools

The purposes of these tools are to: a) clarify the current impact and risk metrics landscape; b) drive the industry toward greater collaboration in reporting industrywide impact; c) support the industry to set clear expectations about the impact of smallholder agricultural finance; and d) push the smallholder community to develop coordinated metrics so that efforts can more efficiently grow the supply of smallholder agricultural finance.

**Effective metrics can relieve binding constraints on the global supply of smallholder agricultural finance and support industry growth in three primary ways:**

- Aggregate, demonstrate, and communicate industry impact
- Drive internal improvement/risk reduction
- Help develop infrastructure that increases efficiency and profitability

**The proliferation of metrics efforts in the smallholder space in recent years has made the metrics landscape crowded and confusing.** Metrics efforts have originated in four distinct communities: certification bodies, technical assistance providers, corporate value chain actors, and investors. Further complicating the landscape is that these frameworks have employed different base units of analysis. For example, some tools measure indicators at the household or farmer level, while others measure at the small and medium enterprise (SME)/cooperative level or the financial institution level. Additionally, the creators of these tools have developed them with different objectives in mind. Some tools aim to be guiding principles, while others are metrics libraries, data collection tools, databases of industry information, or methodologies for scoring metric data after it has been collected.

**A number of efforts are currently underway to harmonize the metrics landscape.** Collaboration efforts put forth by various actors serving the smallholder community will help ensure that they do not simply yield

yet another list of metrics and further confuse the landscape.

**The Initiative for Smallholder Finance considers impact and risk measurement to be related concepts.** The risk of client default in smallholder agricultural finance is directly linked to an agricultural lending program's ability to drive impact in the form of increased production, stable and premium pricing, and sustainable practice adoption – the metrics that form the basis of impact measurement. Lending programs that do not create additional income for farmers run a significant risk of default. Programs that do not encourage sustainable practice adoption run both reputational risks of being associated with socially or environmentally exploitative activities, as well as the risk that farmer's products are unable to find markets – in this case, farmers' incomes would not increase.

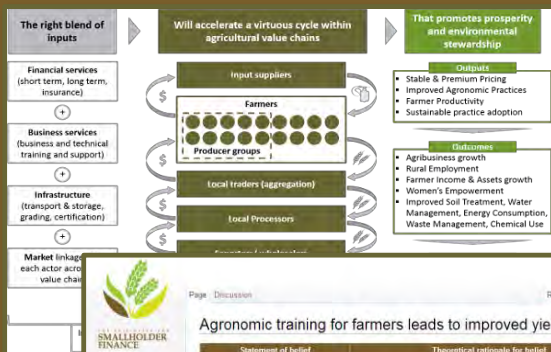
## Boosting Collaboration in Smallholder Finance

The Initiative for Smallholder Finance's new tools seek to clarify the smallholder metrics space and set the stage for increased collaboration. The Initiative recently created:

1. **A Universal Smallholder Theory of Change**, which represents an emerging consensus on a common theory of change across the smallholder agricultural finance community.
2. **A Smallholder Impact Literature Wiki**, seeded with over 100 relevant citations. The Wiki is a platform (editable by anyone in the smallholder community) that will capture, organize, and easily access the growing body of literature about smallholder interventions.

### THE INITIATIVE FOR SMALLHOLDER FINANCE'S NEW METRICS COLLABORATION TOOLS

The new tools intend to simplify the complicated landscape of impact measurement in smallholder finance:



**Universal Theory of Change:** represents an emerging consensus across investors, technical assistance providers, certification bodies, and commercial brands on how best to support smallholder farmers

➤ [www.globaldevincubator.org/isf/metrics](http://www.globaldevincubator.org/isf/metrics)

**Smallholder Impact Literature Wiki:** enables the smallholder community to easily access the growing body of literature about the impact of smallholder interventions

➤ <http://smallholderimpactliterature.globaldevincubator.org>



### Smallholder finance: Impact and risk assessment tools

An inventory of principles, methodologies, metrics, data collection efforts and data aggregators that can be used to guide, track, measure and report activities in support of smallholder farming.



Click on shapes to zoom in and outside of them to zoom out

Moving the mouse to the right hand side will show a navigation panel that can be used to zoom in and out or return to the main view

**Landscape of Smallholder Impact and Risk Assessment Tools:** helps smallholder agricultural lenders develop a clear understanding of the many tools available to meet metrics needs

➤ <http://smallholdermetricslandscape.globaldevincubator.org>

3. **A Landscape of Smallholder Impact and Risk Assessment Tools**, which includes an interactive map and accompanying video that present an inventory of the existing tools for smallholder impact measurement.

### Universal Theory of Change

In consultation with leading smallholder agricultural investors, technical assistance experts, certification bodies, commercial agricultural brands, and many of the foundations supporting the space, the Initiative for Smallholder Finance developed a Universal Smallholder Theory of Change. **The Theory of Change (see Figure 1) represents an emerging understanding of how improvements in access to finance, technical assistance, markets for products, and country-level infrastructure can unlock a virtuous cycle that centers on the agriculture value chain for smallholders.**

This cycle can lead to improved productivity, income, resilience, and reduced risk. Embedded in the Theory of Change is the recognition that trust and shared value among value chain actors is paramount to any effort to improve the livelihoods of smallholders.

**The Universal Theory of Change can help shape a shared vision so the industry can tell a cohesive story about the impact their work is creating for smallholder farmers.** Research organizations will be able to focus resources and efforts to demonstrate the relationships represented in the Theory of Change. This will free practitioners from the need to conduct costly outcome and impact-level studies for all of their activities and will allow them to focus on a small number of metrics that capture the scale of their activities. As Figure 1 shows, the Universal Theory of Change provides a framework in which this type of collaboration can take place.

Figure 1: Universal Theory of Change

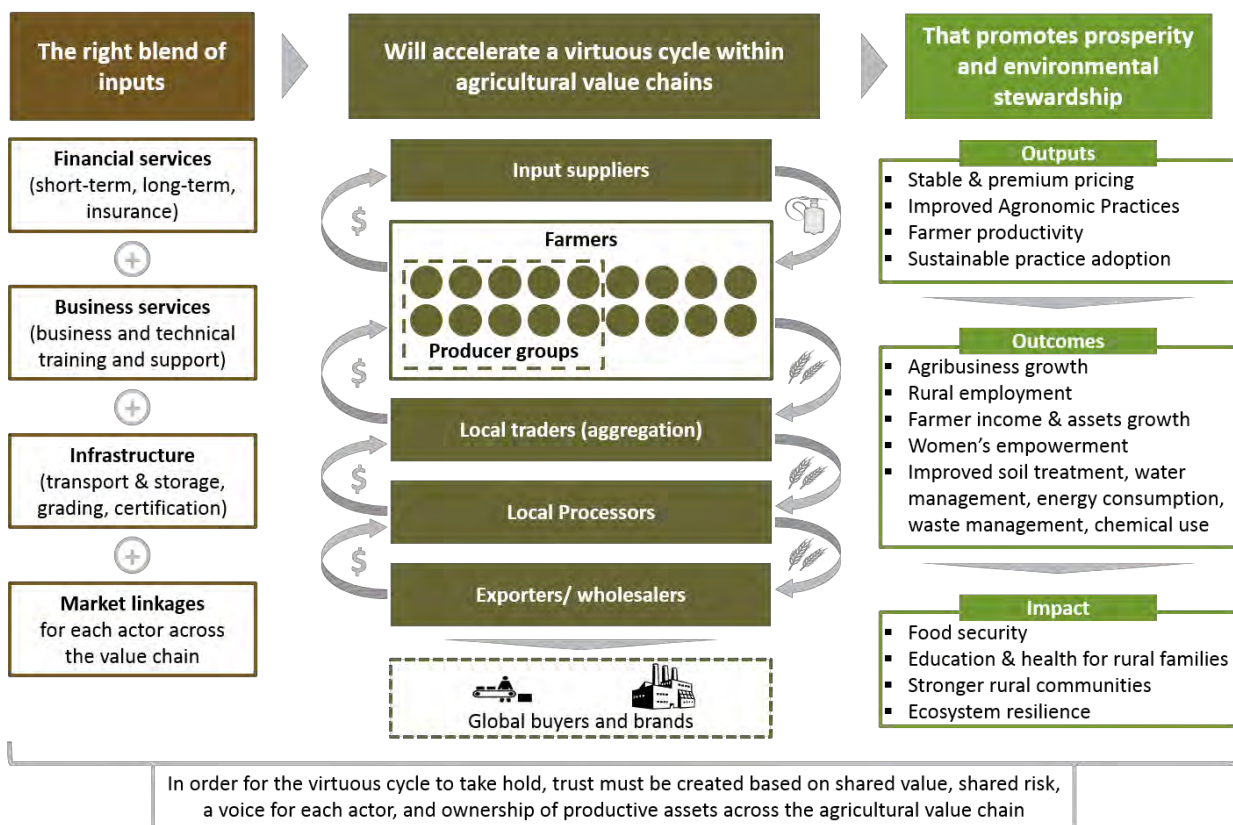
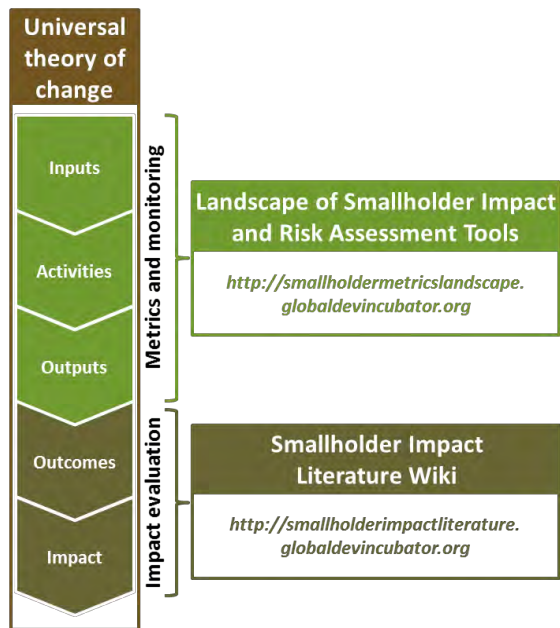


Figure 2: Theory of Change-driven impact measurement



## Smallholder Impact Literature Wiki

The Initiative for Smallholder Finance created the Smallholder Impact Literature Wiki to collect and organize a body of evidence to support the Universal Theory of Change. The Initiative has seeded the Wiki with over 100 relevant articles, studies, and trials about smallholder impact. The free tool is available at <http://smallholderimpactliterature.globaldevincubator.org>. The Wiki is intended to be a living tool and, like Wikipedia, anyone may add or modify content. The future success of the Wiki is contingent on researchers and practitioners actively using and contributing to it.

The Wiki will allow practitioners to quickly access studies and findings that can reinforce their impact and inform new efforts. Literature from the Wiki will help practitioners better understand and communicate the context and external factors affecting the impact of their activities. Field-builders (foundations, researchers, and leading social investors) can look at the Wiki to identify knowledge gaps and more effectively prioritize their research. Finally, the Wiki will also be a platform on which multi- and bi-lateral institutions, academics, and other researchers can promote the growing body of evidence they are creating.

The Smallholder Impact Literature Wiki will help the industry set clear expectations around the impact of smallholder agricultural finance. Sharing information will help the smallholder finance industry avoid pitfalls that the microfinance industry has faced.

Over the last five years, the microfinance community has struggled to respond to claims that it has oversold its impact potential. Critics have said the industry claims to be “putting poverty in a museum”<sup>2</sup> while more rigorous studies have suggested that access to financial services is only effective in reducing poverty under certain circumstances and within certain groups. We hope that the smallholder agricultural finance community can avoid this pitfall of uncertain impact by actively using the Wiki to share reliable information about impact metrics.

## Landscape of Smallholder Impact and Risk Assessment Tools

The free Landscape tool, located at <http://smallholdermetricslandscape.globaldevincubator.org>, seeks to clarify what can often be a daunting collection of metrics tools. It outlines the range of principles, methodologies, metrics libraries, data collection tools, and data aggregators that the smallholder community uses. Users can sort through the tools by their unit of analysis (e.g., farm, cooperative/SME, or financial institution) and read detailed information about each tool. To help further “demystify” the metrics space, the website also features an eight-minute guided walk-through of the landscape.

**Together, the Wiki and the Landscape of Smallholder Impact and Risk Assessment Tools will capture and aggregate existing tools in a clear way, helping practitioners reduce the duplication of metrics efforts.**

## Eight Key Smallholder Impact Metrics

Leading social lenders have identified eight metrics to tell the story of the industry’s impact and help motivate further investment in improving smallholder access to finance. These eight metrics are aligned to leading impact investing frameworks – the Impact Reporting and

Investment Standards (IRIS) and the Finance Alliance for Sustainable Trade (FAST) – and center on information that is easy for smallholder agricultural lenders to collect. If the smallholder agricultural finance community commits to collect these metrics and share their metrics with an industry aggregator, such as the Global Impact Investing Network’s IRIS, the community will be able to more cohesively communicate how their efforts improve smallholders’ access to finance.

**After reporting on this simple set of metrics to capture the scale of their activities, organizations will have little reason to measure additional indicators, unless they drive business value.** Examples of metrics that might drive business value include:

- Traditional lending metrics for a client’s ability to repay a loan or ownership of assets
- Regional- or crop-specific metrics regarding soils, climate, or other factors that affect smallholders’ ability to repay debt
- Metrics aimed at better understanding client needs, income cycles, and preferred products

The actual metrics an organization chooses to collect will vary dramatically depending on its region, value chain position, target client, and type of lending instrument, among other considerations. The Landscape of Smallholder Impact and Risk Assessment Tools profiles a number of existing metrics libraries that may be useful for organizations trying to identify valuable metrics.

Because standardizing such metrics can be difficult, however, some smallholder agricultural lenders will choose to employ local agriculture experts to develop risk-related metrics. The entire agricultural lending team at Opportunities International Savings and Loan in Ghana, for example, has a background in agriculture. In addition to metrics selection, data collection can also be a challenge for lenders; the Landscape of Smallholder Impact and Risk Assessment Tools outlines a number of innovative new tools that are reaching the market to help in these efforts.

**While there is usually only proprietary value in standardizing metrics within an organization for internal use, metrics can drive substantial shared business value when they form the basis of data-driven external collaborations.** Credit bureaus in developed markets are one example of effective metrics collaboration. Without the existence of credit bureaus, banks in developed markets would need to conduct extensive background

### EIGHT METRICS TELL THE “IMPACT STORY”

A group of leading social lenders\* recently came together to identify eight metrics which tell a concise story about the scale and impact of smallholder agricultural finance.

IRIS** metric (IRIS code)	Industry impact story
1: Client Organizations (PI9652)	Last year the industry financed _____ businesses representing _____ farmers, including _____ female farmers as well as _____ permanent employees, that together sustainably cultivated _____ hectares. These businesses collectively earned revenues of _____, paid _____ to farmers and exported _____ kilograms of food into sustainable supply chains.
2: Supplier Individuals (PI5350)	
3: Supplier Individuals: Female (PI1728)	
4: Permanent Employees (PI8869)	
5: Sustainable Cultivated Land Area – Indirect (PI6796)	
6: Earned Revenue (FP5958)	
7: Payments to Supplier Individuals (PI1492)	
8: Units/Volume Exported (PI9029)	

\* This group includes: Alterfin, Oikocredit, Rabo Rural Fund, ResponsAbility, Root Capital, Shared Interest, and Triodos Sustainable Trade Fund

\*\* Impact Reporting and Investment Standards (IRIS) is a catalog of generally accepted performance metrics that leading impact investors use to measure social, environmental, and financial success, <http://iris.thegiin.org>

checks and due diligence before issuing credit cards or personal loans. The accompanying expense would drive the cost of these products up to a level impractical for customers. Because a data-driven collaboration exists in the form of credit bureaus, most developed markets are able to support thriving personal loan and credit card industries.

Within the smallholder agricultural finance market, a collaboration aimed at classifying agricultural cooperatives consistently based on payment history and credit currently extended could play a similar facilitative role.

**Despite the promise of data-driven external collaborations, few existing metrics efforts seek to enable such collaborations.** As shown in Figure 3, the majority of the industry’s metric efforts to date have focused on aggregating and demonstrating industry impact or creating common metrics libraries for internal

Figure 3: Dearth of metrics initiatives aimed at catalyzing industry growth

		Purpose		
		Internal improvement / risk reduction	Aggregating, demonstrating, or communicating impact	Catalyzing industry growth
Unit of Analysis	Financial institution	Agrifin APMS tool	IRIS	Market need
	SME	FAST SIAMT	Social lender Core metrics	
	Farmer	Sustainable Food Labs	ISEAL Alliance shared metrics COSA	

Note: the tools shown in this analysis are a subset of the metrics libraries found within the Landscape of Smallholder Impact and Risk Assessment Tools. IRIS stands for the Global Impact Investing Network's Impact Reporting and Investment Standards, FAST is the Financial Alliance for Sustainable Trade, and COSA represents the Committee on Sustainability Assessment.

improvement and risk reduction. These tools are useful, but additional focus should be placed on the development of collaborations that can catalyze industry growth.

One notable exception that focused on catalyzing growth is a recent Rainforest Alliance and Citi Foundation report on farmer bankability.<sup>3</sup> This work highlights opportunities for banks to leverage, in their lending decisions, the farm-specific information that certification bodies such as the Rainforest Alliance already collect. These partnerships create value for lenders – in the form of direct farmer access and farmer data – that can be captured by certification program to help offset certification costs.

While the previous example is limited by the reach of certification bodies, it can serve as a model for other data-driven collaborations between lenders, as in the credit bureau example, or between actors working with smallholders in different ways – as the Rainforest Alliance and Citi Foundation collaboration demonstrates. Examples of data-sharing that could catalyze industry growth include:

- A data-sharing platform into which farmers or cooperatives enter metrics data for other

industry actors to use, akin to a **Capital IQ** for the smallholder space

- A system that classifies cooperatives based on payment history or credit extended, akin to the credit bureaus in developed markets
- A tool that identifies regions and value chains where smallholders are active, akin to the Microfinance Information Exchange

The organizations currently offering tools in the two leftmost columns of Figure 3 could foster these types of collaborations. Practitioners, investors, donors, and others in the smallholder community should seek to identify and support data collaborations that add business value.

**While the industry will need to standardize metrics to drive data-sharing initiatives, to be effective, industry actors must identify business objectives as a first step.** Industry actors included but not limited to state banks, microfinance institutions, and social lenders will find it challenging to determine which metrics are most important without first thinking about business objectives. Without clear objectives, they would also run the risk of spending unnecessary money on data collection

or missing important data points. Further, after the industry has created a shared vision and an expectation of shared value, various players will be more likely to release their data to one another.

## Conclusion

**It is time for the smallholder agricultural finance community to focus on metrics efforts that can catalyze the growth of the industry; the Initiative's new tools will help the industry demonstrate impact – an important foundation for growth.** By embracing the Universal Theory of Change and using the Smallholder Impact Literature Wiki and Landscape of Smallholder Impact and Risk Assessment Tools, the industry can simplify the complicated world of impact and risk assessment.

Supporting the eight metrics recommended by leading social lenders and ensuring that lenders contribute the metrics to aggregators such as IRIS will help the industry tell a cohesive impact story. The immediate next step, however, is for the smallholder agricultural finance community to collaborate with peers and other industry actors to develop collaborations based on data sharing that can drive business value.

---

*To learn more about the tools explained in this document, visit the Initiative for Smallholder Finance metrics web portal: [www.globaldevincubator.org/isf/metrics](http://www.globaldevincubator.org/isf/metrics)*

## Notes

<sup>1</sup> The total amount of debt financing supplied by local banks to smallholder farmers in the developing world is approximately \$9 billion and meets less than 3% of the estimated total smallholder financing demand, which is \$300 billion excluding China and \$450 billion globally. For a more detailed look at supply and demand of capital by smallholder farmers, reference the Initiative for Smallholder Finance Briefing 1: "Local Bank Financing for Smallholder Farmers: A \$9 Billion Drop in the Ocean"

<sup>2</sup> Yunus, Muhammad, and Karl Weber (2007). Creating a world without poverty: social business and the future of capitalism.

<sup>3</sup> Rainforest Alliance and the Citi Foundation (2013). Farmer Bankability and Sustainable Finance: Farm-Level Metrics That Matter



## RESEARCH BY

# Dalberg

Dalberg Global Development Advisors is a strategy and policy advisory firm dedicated to global development. Dalberg's mission is to mobilize effective responses to the world's most pressing issues. Dalberg works with corporations, foundations, NGOs, and governments to design policies, programs, and partnerships to serve needs and capture opportunities in frontier and emerging markets.

## ACKNOWLEDGEMENTS

This study builds on the knowledge, experience, and research of many experts in the field of smallholder agricultural finance and impact and risk measurement. The findings and analysis in these pages would not have been possible without the individuals from more than 20 organizations who shared methodologies, insights, and perspectives.

The authors would like to acknowledge and thank the sponsors of the Initiative for Smallholder Finance – the Citi Foundation, Ford Foundation, KFW Development Bank, MasterCard Foundation, Skoll Foundation, and USAID – for their support and financing. Additionally, we would like to thank the Aspen Network of Development Entrepreneurs, Business Action for Africa, Business Fights Poverty, CGAP, Root Capital, and TechnoServe for their advisory support.



## PERSONS INTERVIEWED

The authors are grateful to the following people for allowing us to interview them while conducting research for this briefing:

Ajai Nair - World Bank  
Andrew Ridley - Shared Interest  
Audrey Timmermans - Alterfin  
Blaine Stephens – Microfinance Information Exchange  
Daniele Giovannucci – Committee on Sustainability Assessment  
Don Seville and Emily Shipman - Sustainable Food Lab  
Dr. Kristin Komives – ISEAL Alliance  
Edwin Ou and Ehren Reed – Skoll Foundation  
Ellen Willems - Triodos  
Flory Wilson – B L ab (GIIRS)  
Frank DeGiovanni – Ford Foundation  
Genevieve Edens and Saurabh Lal- ANDE  
Lucas Simons - Scopelnsight  
Michelle Buckles and Jesse Grillo - Rainforest Alliance  
Mike McCreless – Root Capital  
Paul Goodman - Acopio  
Pierre Courtmanche - Geotraceability  
Sarah Gelfand and Ellen Carey – Global Impact Investing Network  
Semida Minteau - Financial Alliance for Sustainable Trade  
Simon Winter and Jennifer Golden - TechnoServe  
Sonja Ooms - Oikocredit  
Steven Wright and Elaine Chang - Grameen Foundation  
Tom Adams - Acumen Fund

## ABOUT THE INITIATIVE FOR SMALLHOLDER FINANCE

The Initiative for Smallholder Finance is a multi-donor initiative hosted by the Global Development Incubator to build research and development infrastructure in the smallholder finance industry and make progress toward filling the gap in financing through targeted product development, piloting, and partnerships.

For the original report that led to the creation of the Initiative for Smallholder Finance, see "[Catalyzing Smallholder Agricultural Finance](#)" (2012).

## AUTHORS:

This study was authored by CJ Fonzi and Veronica Chau of Dalberg Global Development Advisors. Jennifer Mickel, Joan Oleck, and Sara Wallace provided editorial and design support.

[www.globaldevincubator.org/smallholderag](http://www.globaldevincubator.org/smallholderag)