



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative



FEED THE FUTURE INNOVATION LAB FOR ASSETS AND MARKET ACCESS

2017 ANNUAL REPORT



USAID
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UC DAVIS
UNIVERSITY OF CALIFORNIA

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Executive Summary

In October 2016, the Feed the Future program released their new Global Food Security Strategy. This whole-of-government guiding document elevated resilience to a top objective of its global food security and poverty reduction efforts. We at the Feed the Future Innovation Lab for Assets and Market Access (AMA Innovation Lab) welcomed the elevation of one of our own key areas of research to what we have long felt is its rightful place.

AMA Innovation Lab researchers have been working on these issues for over a decade. In 2006, AMA researchers published work that led to a new and fundamental understanding about the dynamics of poverty, and that - as an indication of its influence on the broader dialogue - remains the most downloaded article in that preeminent journal to this day.

This research created a fundamental understanding of the problem allowed the Lab and partners and collaborators around the world to design and test innovative solutions to age-old problems. As most of our research projects begin to come to a close, we can take stock of what we have learned, and where the next areas of inquiry are.

Most of our findings fall into two categories which are deeply connected in their goal of building resilience and food security: interventions that protect people from falling into poverty traps, and interventions that unlock productive opportunities to enable people to escape poverty traps.

The first category of interventions is designed to prevent descents into poverty traps, which for many can be inescapable. By enabling households to better manage their risk, we can help to promote resilience to shocks. Agricultural index insurance is an innovation that can bring protection against catastrophic shocks to populations that were unreachable for traditional insurance. AMA Innovation Lab



research has shown that, compared to their peers, insured pastoralists in East Africa are less likely to resort to distress sales of assets, reduction of consumption, and reliance on emergency food aid.

The second category of interventions seeks to enable smallholder farmers to move take advantage of growth opportunities. For developing countries, there is a gap between what is technologically achievable and what is typically achieved by local farmers. AMA Innovation Lab researchers are researching these barriers to better understand what they are, and to design and test interventions to ease these constraints so that farmers can meet their productive potential.

As we increase our oefforts to disseminate what we have learned to date, we look forward to continuing the conversation with stakeholders to ensure that we can help to close the gap between this important research and implementation.

Program Activities and Highlights

Over the past year, our program has seen two serendipitous trends: increased research results and lessons learned becoming available, and increased demand for resources and lessons learned from our work. This increased demand for resources around our major thematic areas of work is exciting. Much of this is in response to the trend, led in part by the U.S. Government's Global Food Security Strategy, to work toward resilience as a key objective in poverty reduction.

In response, our activities have shifted dramatically to respond to these trends. While we continue to manage several projects that are only just completed or completing in the next year, the focus of our attention has transitioned to synthesis, distillation, and dissemination of results.

MANAGEMENT OF AWARDS AS THEY CLOSE (OR APPROACH CLOSE)

As awards close or approach the end of their award, the Management Entity continues to monitor these awards against their goals, ensure that they are on-track to meet objectives, and to work with researchers to address any problems/challenges.

COLLABORATION WITH EXTERNAL EVALUATION COMMITTEE

This year, USAID and BFS initiated the external review process for the AMA Innovation Lab. Throughout the year, the management team at the AMA Innovation Lab worked to prepare materials for the external evaluation committee and work with the committee to ensure that they had everything they needed for a thorough evaluation.

IMPLEMENTATION OF FOCUSED COMMUNICATIONS STRATEGY

The 2017 Communications Strategy built on the momentum that began in 2016, and included a completely revamped website, a monthly newsletter, and a series of strategic efforts to spread information about the AMA Innovation Lab and our results.

INCREASED DEVELOPMENT OF HANDS-ON RESOURCES AND TOOLS

In response to increased interest in some of the innovations under research at the AMA Innovation Lab, the management entity has increased attention on development of hands-on resources and tools that can readily be used by implementation partners.

INCREASED ENGAGEMENT WITH EXTERNAL STAKEHOLDERS

Through myriad means, the AMA Innovation Lab has increased their stakeholder engagement over the past year, in particular through AMA Innovation Lab hosted events, presentations at leveraged events, and one-on-one meetings with key stakeholders to discuss research findings and policy implications.

EXCITING NEW COLLABORATION WITH ICED

The International Center for Evaluation and Development (ICED) is the first Africa-based international think-tank that combines research and innovation with extensive practical experience in evaluation for development in Africa. By increasing our connections with in-country research institutions, policy makers, and implementing partners, we are leveraging this opportunity to contribute both to our capacity building objectives and to increase the probability that our findings will be integrated into policies and programs.

2017 Key Accomplishments

As we near the end of our award, our research projects have generated a critical mass of evidence that can help to enhance the resilience of smallholder agriculturalists, including the following:

- An impact evaluation in Kenya, working directly with a private seed company and supported with impact investors, found strong evidence that a local seed company can increase smallholder productivity by developing varieties fine-tuned to niche agro-ecological environments that are often overlooked by larger seed companies.
- In eastern Uganda, researchers found that three seasons after BRAC programming ended there was no decline in rates of improved seed adoption and farmers still used the program's cultivation techniques.
- An impact evaluation of rapid, on-site soil diagnostic technology found evidence of such variation among farms suggest that the national-level recommendations issued by the government may not be appropriate for many farmers. This also suggests that if the average farmer followed the government recommendation, he/she would pay more for fertilizer than necessary.
- In Nepal, researchers found that if internal constraints like low aspirations prevent households from making investments that may one day lift them out of poverty, then interventions might be more effective by addressing internal as well as external constraints. However, if aspirations are too large compared to one's current status, they may result in failure and frustration. Programs that seek to boost aspirations should be careful to not provide false hope.
- Women offered insured loans in Ghana were 15-17 percent more likely than women in the control group to apply for loans.
- In Bangladesh, "good borrowers" with BRAC were offered emergency loans for when disasters occur, and intervention designed in partnership with AMA Innovation Lab researchers. In 2017, the organization disbursed emergency loans to approximately 800 borrowers through

the flexible financial product.

- A digital trading platform in Uganda has recorded 21,000 asks, 22,000 bids, had conducted 11,000 matches (manual or automatic), conducted 898 successful sales involving over a thousand tons of grain.
- In an experimental game that simulates fishery co-management, real fishers were 50% more likely to deplete their shared resource when the game included the threat of punishment for using illegal fishing gear; policy makers should consider such compensatory behaviors when users are making multiple self-interested or cooperative decisions to avoid unintended system collapse.

Research Program Overview and Structure

DIRECTOR:
Michael Carter

ASSISTANT DIRECTOR:
Tara Chiu

ACCOUNT MANAGER:
Christine Helsing

**STRATEGIC
COMMUNICATIONS
MANAGER:**
Alex Russell

**COMMUNICATIONS AND
OUTREACH SPECIALIST:**
Sophie Javers

The Assets and Market Access Innovation Lab Management Entity currently includes of 6 individuals. The office includes a 50% Director, full-time Assistant Director, 60% Financial Analyst, full-time Strategic Communications Manager, 60% Communications and Outreach Specialist and a Management & Outreach Student Assistant (15 hours/week).

The *Director* takes primary responsibility for the technical oversight of the projects. He closely reviews all proposals and work plans of the selected projects for technical soundness, and continually reviews the projects through both Technical Committee meetings and direct communication with researchers throughout the life of the project.

The *Assistant Director*, Tara Steinmetz, is responsible for the day-to-day operations of the AMA Innovation Lab. She is responsible for budget monitoring and providing the Director with necessary information to make funding and other management decisions. She ensures that all projects meet reporting requirements, and are making progress toward specific benchmarks that were approved at the beginning of the project. This is done to make sure that each project continues to make progress towards demonstrable impact.

The *Financial Analyst*, Christine Helsing, provides contracts and grants administration, including taking the lead on managing outgoing subcontracts, modifying existing subcontracts, and working with University of California, Davis offices on their oversight. She is also responsible for invoice approval and tracking of subcontract spending.

The *Strategic Communications Manager* develops and implements a strategic communications plan for international development, agricultural, economics, and related stakeholders. He establishes and maintains connections with media, key stakeholders, researchers, news service groups and related agencies. The Strategic Communications Manager works with the Communications and Outreach Specialist to ensure outreach to lay audiences is appropriately aligned with the strategic communications plan.

The *Communications and Outreach Specialist*, Sophie Javers, focuses on the design and implementation of events, comprehensive interviews, coordination and edit of field reports, engagement in blogs, and other content development in coordination with the strategic communications plan and in alignment with the activities of the Strategic Communications Manager.

Themes

These themes are built around the AMA Innovation Lab's understanding of the challenges we face in building resilience and food security. We continue to generate, distill and disseminate evidence to enhance resilience and promote inclusive agricultural growth.

Poverty Dynamics

It is essential to develop and test anti-poverty interventions that effectively address all root mechanisms that cause poverty to persist.

Technology Adoption

The AMA Innovation Lab is supporting research to better understand these roadblocks that stop farmers from adopting new innovations, even when they are locally available.

Risk Management

To improve the lives of these smallholders through increased income stability and enabling them to take advantage of the opportunities open to them, risk management is essential.

Theme A: Poverty Dynamics

Effective policy to reduce poverty requires multi-dimensional thinking.

Responses to only one among the financial, human, natural, physical and social capital that could help a family lift themselves out of poverty might miss the root causes of persistent, extreme poverty in a complex, real-world setting.

To achieve the Sustainable Development Goal of eliminating extreme poverty by 2030, it is essential to develop and test anti-poverty interventions that effectively address all root mechanisms that cause poverty to persist. The depth, persistence and concentration of extreme and ultra-poverty raises the prospect of poverty traps. In recent years, economists have built on the theory of poverty traps in ways that have changed how we think about what is needed to create opportunity for those in desperate need, suggesting new directions that could indeed lead us to the end of rural poverty globally.

AMA Innovation Lab researchers' model of poverty traps has become an incredibly useful tool for understanding what types of interventions can effectively create opportunities for poor and vulnerable households. This model is based on the idea that assets and capability are the two fundamental types of capital determine a household's likelihood of poverty. Assets can include land, buildings, livestock, machinery, liquid assets and other forms of physical capital. Human capability encompasses concepts such as skill, human capital and self-efficacy.

A household's assets and capability, as well as the environmental and other risks they face, combine to determine their degree of risk of falling below what we call the Micawber threshold into long-term chronic poverty. Below the Micawber threshold, a household's efforts to save or invest toward a more prosperous future make them no more likely to escape poverty. Without intervention, households with levels of assets and capability that place them below the Micawber threshold will always be poor. However, in relatively poor and unproductive economies, transfers of cash or other forms of non-human capital alone are unlikely to help these households to free themselves from poverty.

Households with moderate levels of assets and capability can be in different circumstances. Some may be poor while others may only be at risk of poverty. However, for all of these households a shock to their assets or capability from an environmental catastrophe or a lost source of income may drive them into chronic poverty. Their resilience, meaning their ability to withstand these kinds of shocks, depends on how close they are to the Micawber threshold.

Theme B: Technology Adoption & Market Access

CONSTRAINTS TO THE ADOPTION OF IMPROVED TECHNOLOGIES

The Feed the Future Innovation Lab for Assets and Market Access have identified three main categories of constraints to the adoption of improved technologies:

1. Risk and Liquidity
2. Beliefs and Behavior
3. Profitability

The portfolio of research under this theme include projects that seek to better understand these constraints, and to develop and test solutions to loosen the constraints that emerge as driving this challenge.

Agricultural research aimed at developing countries has typically focused on advancing the technological frontier: developing new tools, fertilizers, and hybrid seeds that increase crop yields, and ultimately, resiliency in the face of climate variability. However, the fact that average small farm yields consistently fall well below what is technically possible indicates that the benefits from these new innovations are not being realized by farmers.

While much has been done to understand the supply-side constraints, such as input supply networks, that prevent farmers from adopting valuable new technologies, there are also significant demand-side obstructions. The AMA Innovation Lab's body of research has identified three main categories that constrain the adoption of improved technologies:

1. RISK AND LIQUIDITY

Farmers are often hesitant to adopt beneficial technologies because they are seen as prohibitive income and production gambles. New financial instruments like index insurance and other support systems such as improved credit access are helping to mitigate these un-hedged risks, allowing farmers to take on prudent risk and invest more securely in their futures.

2. BELIEFS AND BEHAVIOR

Behavioral factors have significantly constrained farmers' acceptance of new technologies. Effective mechanisms are being tested to improve smallholder farmer knowledge and decision-making about the acquisition and deployment of advanced technologies. Research, for example, into the role social networks can play in increasing technology adoption is also proving very promising

3. PROFITABILITY

The yield gap can be particularly immovable when available technologies, once applied, do not actually benefit farmers. Poor soil, lack of access to markets, and unprofitable input prices, all hinder a farmer's ability to

sustainably improve food and wealth security. Tailoring technologies to take into consideration agro-ecological differences enables those modified technologies to be more successfully scalable in heterogeneous conditions. The adaptation of new mechanisms for smallholders to collectively capture economies of scale, navigate local commercial systems, and remain a part of the value chain, is an encouraging area of research that will help to relax constraints and allow the yield gap to close further.

The AMA Innovation Lab is supporting research to better understand these roadblocks that stop farmers from adopting new innovations, even when they are locally available. Further, AMA researchers are working to design and test interventions to close yield gaps, increase productivity, and secure more sustainable livelihoods – ultimately paving the way out of poverty.

Theme C: Risk Management

Decades of evidence around risk and development indicates that risk:

1) makes people poor by reducing incomes and destroying assets, and

2) keeps people poor by discouraging investment and distorting patterns of asset accumulation.

When financial alternatives are limited, in the face of disaster, households are left with negative coping strategies that all can have costly long-term economic consequences.

Risk has emerged as a major constraint to improving the resilience and food security of impoverished and vulnerable agriculturalists. The problem manifests in a number of different ways, most notably by driving farmer behavior to negative coping mechanisms both before and after disaster strikes.

Before a disaster occurs, smallholder farmers often self-insure by avoiding investments in risky, but profitable, opportunities. Farmers may hesitate to spend what little they have on improving on-farm productivity, for fear that if disaster strikes and all is lost, they will have lost not only their income and/or food source for the season, but also the investment they made.

After a disaster occurs, smallholder farmers are often left without a resource to help them respond to the shock. They may respond by selling remaining assets, which can inhibit their ability to bounce back and re-engage in their livelihood in the next season. Alternatively, many farmers will dramatically reduce consumption, even down to one meal a day. This has significant human capital costs, especially for children under five, and can contribute to the intergenerational transfer of poverty. Many more rely on food aid or humanitarian assistance when all other options have been exhausted.

One innovation that the AMA Innovation Lab has invested in testing and refining is index-based agricultural insurance. The presence of this financial option can enable households to be more resilient when disaster strikes, both by investing more in on-farm productivity so good years are better, and helping them avoid costly negative coping strategies when disasters do occur. An extensive body of research, including real-world trials, has indicated that agricultural index insurance can play a significant role in the portfolio of risk management tools employed by smallholder farmers.

AMA Innovation Lab Approach to Human and Institutional Capacity Development

GUIDING PRINCIPLES FOR HICD

In order to ensure we appropriately integrate a bottom-up approach to capacity development into our research, we rely on the following three guiding principles

- 1. Avoid being overly prescriptive in the call for proposals*
- 2. Focus on host country institutions as the core conduit for capacity development*
- 3. Engage with researchers who have long-term relationships with host country partners and who understand the individual and institutional challenges in a nuanced way*

Our primary objective as a research institute is to produce high-quality, policy relevant research that integrates training and capacity building into the process. As it says in our original proposal to serve as management entity, “one attribute of the US research university model is that it co-produces such training and capacity building as part of the research and discovery process.”

This approach is the most appropriate for university-based research programs such as ours, for many reasons. By integrating collaborative relationships into the program design, the goals and objectives of capacity development directly reinforce our goals and objectives of research.

By directly engaging individuals, institutions and private sector partners in the project design, we can promote an inclusive approach to capacity development that comes from the bottom, not the top. This approach also makes efficient use of limited resources, especially since this design allows our capacity development and research goals to reinforce each other.

COLLABORATIONS WITH RESEARCHERS AND INSTITUTIONS

In a university-based research program like the AMA Innovation Lab, one of the key ways in which capacity development occurs is through a deep relationship between the researchers and institutions in the US and the host country. Occasionally this occurs through new, innovative partnerships, but most often researchers approach the Lab with preexisting relationships and collaborations. By supporting the continuation of these long-term relationships, we can increase the probability of effective capacity development.

For example, the research on rapid, on-site soil diagnostics in Tanzania is being done via a collaboration between the Agriculture and Food Security Center (the AgCenter) at Columbia University and Sokoine University in Tanzania. The AgCenter and Sokoine University have a long history of collaboration with deeply engrained intellectual and administrative relationships that greatly facilitate and support the study.

Country	LONG-TERM TRAINING		SHORT-TERM TRAINING	
	Male	Female	Male	Female
Burkina Faso	-	-	35	2
Ghana	8	8	35	2
Kenya	1	-	200	150
Nepal	1	1	35	25
Uganda	193	27	1,123	191
Total	203	36	1,428	370

AMA INNOVATION LAB'S GOALS AND OBJECTIVES FOR HICD

Increase the capacity of host country researchers and institutions to conduct rigorous research on agricultural development, economics and related fields

Increase the capacity of policymakers and program developers (including the private sector) to understand research findings and to leverage evidence-based recommendations for policy and programming

Increase the capacity of target populations (typically smallholder farmers) to take advantage of the financial and technological innovations available to them to promote inclusive agricultural growth

This relationship has allowed the leadership on the study to more deeply understand the best strategies to support HICD. In this case, the bulk of the capacity development was done through engagement with recent university graduates to provide additional learning opportunities and field expertise.

BUILDING CAPACITY & SKILLS AMONG STUDENTS IN PROJECT COUNTRIES

The most obvious way in which capacity building takes place is through the mentorship that occurs when a student works directly with researchers on a rigorous research project. Typically, the work being done by the student is directly related to the core work of the research project, creating a mutually beneficial relationship.

For example, researchers at Columbia University are working with Sokoine University student Gladness Brush as part of her research associated with her degree. Her research topic is to determine best sampling time for fertilizer recommendations and the response of maize to different rates of nitrogen fertilizers based on soil nitrate tests. This student's research will help to improve the site-specific nitrogen fertilizer recommendations being evaluated in the research project.

Our PIs have also offered short courses created around topics such as impact evaluation methodology. The purpose is to build the capacity of university students to better understand and engage with evidence from impact evaluations. In this way, host country faculty can include these new skills in their ongoing training of graduate students, allowing for a multiplier effect.

One of these was a partnership between researchers at Stanford University and Maseno University in Kisumu, Kenya included as a key part of their capacity building efforts several short courses. One of these was a one-day workshop with 30 students (15 male and 15 female) that covered how to design a research question and an introduction to a variety of impact evaluation strategies and analysis techniques to encourage them to think critically about the design and methods being used.

Innovation Transfer and Scaling: Creating Resources for Responsible Scaling

SCALING AGRICULTURAL TECHNOLOGIES

“To realize the full potential of innovation developed to improve nutrition and reduce global hunger and poverty, Feed the Future is intensifying efforts to scale up promising agricultural technologies to millions of farmers and other technology users throughout the value chain in commercially sustainable ways.”

November 2013 Feed the Future Fact Sheet “Scaling Agricultural Technologies”

TOOLKIT FOR INDEX INSURANCE

Index insurance has been gaining momentum both within and outside of USAID. However, as this work continues to expand, it becomes increasingly apparent that there are dramatic inconsistencies with regard to quality of contract design and implementation, and a lack of clarity about the contexts in which this tool would be an appropriate and effective intervention to achieve development objectives.

The AMA Innovation Lab has already initiated work on a “toolkit” for index insurance, which it would like to continue, expand, and develop training materials/courses for. An additional year of resources would allow publication of these guidelines, development of training materials, and – if possible – allow for the development of an interactive, online-based learning tool to increase accessibility and contribute toward learning objectives.

CASE STUDIES

In addition to the Toolkit for Index Insurance, we would like to put together a series of detailed examples of specific index insurance projects. We hope that these case studies will help to illuminate – through concrete examples – why projects either succeeded or failed, and what could have been done differently to maximize the probability of a successful intervention.

SAFE MINIMUM STANDARDS FOR INDEX INSURANCE

One of the innovative tools that has been developed by the AMA Innovation Lab is “Safe Minimum Standards for Index Insurance” or “SMS.” As mentioned above, recent years have seen a number of disappointing index insurance interventions, especially with regard to the low quality of the products being put in the field.

While there may be difference of opinions in how to compare quality across different products, it seems obvious to the AMA Innovation Lab that – at a bare minimum – we can agree that purchasing an index insurance products should not make farmers worse off.

One of the consistent challenges facing both agronomic and financial technologies for smallholder farmers is the transition from pilot to scaled intervention. This includes the transition from publicly-supported implementation with private sector partners to a private sector-led program after public support is withdrawn.

This is the driving concept behind the SMS tool, which will enable analysis of products to see whether or not the product meets this minimum threshold for safety. Because many development agencies, implementing partners, and host government regulators lack the technical expertise to conduct this assessment on their own, our hope is that this tool – and research and dissemination efforts for this tool, will help ensure that development funds are responsibly invested and that index insurance contracts that are in the field meet these minimum safety standards – and ideally exceed them.

For example, our previous work in Nepal on index insurance identified some critical misunderstandings on the part of the local regulators about how to think about these innovative kinds of products; a tool like SMS can help to bridge these knowledge gaps and empower local authorities.

GUIDE TO RESPONSIBLE SCALING OF INDEX INSURANCE

One of the consistent challenges facing agricultural index insurance for smallholder farmers is the transition from pilot to scaled intervention. This includes the transition from publicly-supported implementation with private sector partners to a private sector-led program after public support is withdrawn.

Starting in 2010, USAID has supported a pilot study of index insurance for cotton farmers in West Africa (starting in Mali, then moving to Burkina Faso in 2012 after Mali's coup d'état). Promising results from Mali and Burkina Faso indicate that the presence of index insurance can have positive welfare impacts for these cotton farmers, even before a drought occurs.

In cooperation with private sector partners, the AMA Innovation Lab provided technical support to the project. Now that the USAID-supported research project has ended, the AMA Innovation Lab will provide support to the private sector partners from the pilot study to scale up to new areas and take over the project.

To better understand the conditions that contribute to success or failure

of scaling, we will document this process and identify key takeaways to share with others in the sector seeking to assist with responsible scaling of agricultural index insurance. By documenting these steps and looking closely at an example of a project going through this process, we hope to better understand the conditions necessary and the steps required for safe and responsible scale-up, and to refine and generalize these conditions to provide guidance to other agricultural index insurance pilots.

Governance and Management Entity Activity

KEY 2017 ACTIVITIES

1. *Cooperation with External Evaluation Committee*
2. *Launch of strategic communications plan*
3. *Start of monthly newsletter with AMA Innovation Lab updates*
4. *Website redesign*
5. *Increased stakeholder engagement and mission outreach*

Through 2017, the AMA Innovation Lab Management Entity has participated in an increasing amount of outreach and dissemination activities. This includes 1) project-specific dissemination events, 2) attendance at other organization's related events, and 3) increased production of briefs and other resources for outreach and dissemination.

The AMA Innovation Lab hosted two in-country dissemination events for research projects that had recently completed and were managed by researchers at our host institution, the University of California Davis. Travis Lybbert's research team hosted a dissemination event in Haiti for an impact evaluation of SRI rice. Also, Michael Carter hosted a workshop disseminating the results from an impact evaluation in Kenya testing the impacts of localization of hybrid seed varieties. These events provided opportunities to share the results of these important investigations with key stakeholders.

In addition, the AMA Innovation Lab management entity intensified efforts for broader communications strategies. With the hiring of the Strategic Communications Manager, we were able to investify efforts in general communications and resource creation. This allowed our Communications and Outreach Specialist to engage more strategically with stakeholders and develop the relationships necessary to bridge the gap between research and implementation.

As part of these broader communications efforts, the AMA Innovation Lab launched a monthly update newsletter, which includes a variety of information from updates about our participation in events to the release of specific briefs or resources. This has been developed in concert with a revamp of our website, which increased accessibility of our resources to those seeking to use our research in policy and program development.

Perhaps most significantly, 2017 saw increased participation of the management entity team in key events that engage stakeholders around the world. For example, the Assistant Director participated in the USAID Global Learning and Evidence Exchange (GLEE) events on Markets in both Asia and Africa. This allowed for presentation of AMA Innovation Lab research, discussion of how to utilize the research in policy and program development,

USAID MISSION ENGAGEMENT

A key objective in 2017 was increased and improved engagement with USAID missions. It is often challenging to maintain high quality relationships with USAID missions, in large part due to the turnover that is part of the structure of USAID mission, but the AMA innovation Lab has worked to overcome this through increased and varied engagement strategies to try to reduce the gap between our research and program design.

and the development of key collaborative relationships with USAID missions and their implementation partners. In addition, the AMA Innovation Lab has been - and will continue to - put increased emphasis on participation in topically related events around inclusive finance for smallholder agriculturalists and microinsurance.

Finally, the AMA Innovation Lab has long been an important voice for the need for high-quality design in agricultural insurance interventions. While this has been a discussion for some time, only in the past year have we begun to develop specific, quantifiable measurements that would allow stakeholders to assess contract quality and compare different products. Over the next year, we look forward to determining how to move this forward and actively engage stakeholders to ensure this tool meets its objectives to promote the scaling of safe and responsible agricultural index insurance with high potential for development impact.

Issues

OVERVIEW OF ISSUES IN 2017

This year, the Feed the Future Innovation Lab for Assets and Market Access were primarily challenged as it relates to outreach and dissemination.

Specifically, our top three challenges were as follows:

- 1. Long-term strategic planning*
- 2. Engagement with USAID missions*
- 3. Timing of research results*

In 2017, our biggest issues were related to preparations for outreach and dissemination. Because many of the research projects our recently completed or nearing completion, the AMA Innovation Lab is eager to begin outreach and dissemination efforts to enable stakeholders to learn from the results and implement high-potential interventions as identified by our research. However, several issues have made this work challenging.

First, planning through 2018 was difficult given the AMA Innovation Lab's end date and funding levels provided through 2017. It was also difficult, given the uncertainty about if and when additional funding would be provided, to make long-term plans. We are looking forward to major dissemination efforts in 2018, but without greater certainty of funding, are challenged in making firm commitments for outreach and dissemination activities over the next year.

Second, the AMA Innovation Lab has been challenged in developing reliable relationships with USAID missions. Part of the issue was one of our own making; we lacked a consistent stakeholder engagement strategy (something we look forward to addressing in 2018). However, it is also a consistent challenge to identify the correct point of contact in USAID missions, particularly because our work spans both agricultural and economic topics. We've often found that though we have engaged one of the teams, the other is frustrated at the lack of engagement.

Adding to this challenge, turnover at USAID missions often means our key points of contact move on after we have established an effective collaboration. This can be exacerbated by the lack of a smooth transition to the next appropriate point of contact. We hope the stakeholder engagement strategy we will be implementing in 2018 will help with this issue.

Finally, the timing of research results can be a challenge. Because of the nature of this program as a research program, after a project has ended, it can take fairly significant time for researchers to give us results and key lessons learned. While we respect that this is an integral part of the research process, and we do not want to hurry it in such a way that could threaten the quality of the analysis, it can be frustrating when both we and stakeholders are eagerly anticipating the results.

Future Directions

KEY ACTIVITIES FOR 2018

Create and implement a comprehensive stakeholder engagement strategy

Package research results and relevant evidence into “bundles” to guide stakeholders on how to interpret and apply results

Continue to push the conversation on the need for minimum quality standards for agricultural index insurance

As the Feed the Future Innovation Lab for Assets & Market Access moves into the final year of its current award, we reflect back on the work we have done to date, and think about directions of this research moving forward.

In alignment with the objectives of the Global Food Security Strategy, we are ensuring that our resources are focused on increasing resilience and food security. By building a portfolio of rigorous, focused research, we believe the evidence that is forthcoming will directly contribute to the objectives described in the GFSS and the accompanying Research Strategy that was released over the past year.

Now we look forward to the next steps in this process, which is translating these results into accessible and applicable resources for stakeholders and change agents with the ability to utilize these findings in policy and program development. To drive this process effectively, we will start by developing a comprehensive stakeholder engagement strategy that will ensure that we are meeting the needs of this audience. It will be developed in consistent alignment with our comprehensive 2018 Communications Strategy.

The stakeholder engagement strategy approaches our stakeholders as both an audience for our efforts, and also as a resource as to how we can more effectively translate our research findings into forms that have the high potential for development impact. In 2018 we look forward to both sharing what we have learned with our stakeholders, and learning from them where we need to go and how better to serve these change agents.

To further this goal, we will be packing our research results and relevant evidence into topical “bundles” of results that synthesize across several projects. In addition, we will try to provide guidance to stakeholders on how to interpret and apply results for policy and program development.

Finally, we will continue to drive the conversation about the need for minimum quality standards for index insurance. As insurance is increasingly put forward as a solution for many of the development challenges we face, and a tool for creating resilient populations, we seek to remind people that insurance can only meet its potential if it is of high quality such that it

provides value for smallholder farmers. If it does not do so, it may actually leave farmers worse off than if there had been no intervention at all.

In 2018 we will continue to push the call for safe minimum standards, and put forward resources to help those who wish to implement index insurance ensure that - at a minimum - they do no harm.

Feed the Future AMA Innovation Lab Associate Awards

Evaluating the Impact of Complementary Agricultural and Financial Technologies

PROJECT OVERVIEW

*Collaborating Researchers and
Institutions:*

UC DAVIS

Michael Carter, Professor

Stephen Boucher, Professor

Travis Lybbert, Professor

Laura Paul, Graduate Student

Jonathan Malacarne, Graduate Student

CIMMYT

Paswel Marenya, Socioeconomist

Rodney Lunduka, Socioeconomist

End Date: December 2018

Recent years have seen the separate development of two technologies designed to help small-scale farmers manage climatic stress. The first is seed varieties that better withstand climatic stresses like droughts and floods. The second is the financial technology of index insurance that transfers risk out of small-scale farming systems by issuing compensatory payments when climatic events occur and agricultural production collapses.

In addition to their common ability to stabilize producer incomes in the face of shocks, both seed and financial technologies have the potential to generate a risk reduction dividend as farmers with these risk management tools may invest more heavily in their farms. Yet, these technologies also have important differences. Most importantly, stress-resistant seeds tend to fail under extremely adverse events, whereas index insurance does not.

2017 ACTIVITIES

In partnership with local seed companies in both Mozambique and Tanzania, the research team assisted in the promotion and marketing of drought-tolerant seed and index-based agricultural insurance. In Mozambique, drought-tolerant maize seed was offered for sale by two partner seed companies, Klein Karoo and Phoenix Seeds. Hollard Insurance provided the insurance. In Tanzania, drought tolerant maize is sold through three companies, Suba Agro, Meru Agro, and Iffa Seed Company. The project partnered with UAP to provide the index insurance. In order to improve the protection offered by the contract, the insurance product contains a provision for insured communities to request a yield audit.

Each year, the research team hires a team of local enumerators to conduct a household survey. The 2017 survey was the midline survey for the project. In Mozambique, it was completed during June and July. In Tanzania, it was completed between July and September.

To continue facilitating strong relationships among local partners, stakeholder meetings were organized and carried out by the research teams in both countries in the spring of 2017. The meetings were attended by representatives from the seed and insurance company partners, as well as



specialists in maize breeding and agricultural input marketing from CIMMYT. The meetings gave all stakeholders the opportunity to catch up on project activities and discuss how to most effectively meet the challenges of scaling up seed and insurance sales and distribution.

Evaluating the Impact of Support to Orphans and Vulnerable Children in Mozambique

PROJECT OVERVIEW

Collaborating Researchers and Institutions:

Dean Yang, University of Michigan

End Date: September 30, 2019

In Mozambique, PEPFAR funding is supporting the newly established Strengthening Family and Community Support to Orphans and Vulnerable Children (SFCS-OVC), which aims to reduce the socio-economic impact of HIV/AIDS on these children and their caregivers. Research funded by the AMA Innovation Lab will evaluate SFCS-OVC programs to improve the health and overall outcomes of orphans and vulnerable children in Mozambique. These effects include HIV testing and diagnosis, morbidity and mortality, school attendance and performance and others.

Another key aspect of this study is to estimate of the economic strengthening component of the SFCS-OVC program, both separately and in interaction with the four community support components. This will be achieved via randomization of the economic strengthening component separately from the community support components. The independent effect of these components, and their interaction, have not previously been estimated.

This study will provide direct insight into the impact of the community support treatment, the economic strengthening treatment and their interaction can influence future rollout and scale-up of the SFCS-OVC program. This study's impacts would be most direct in Mozambique, but could also influence the design and implementation of policies across Sub-Saharan Africa and the rest of the developing world.

2017 ACTIVITIES

In 2017, the project proceeded as planned. The research team revised the IRB in Mozambique, and obtained IRB approval from the University of Michigan. In addition, the project conducted a pilot survey, collected school records data from the 76 participating communities, and initiated the household baseline survey.

By the end of the report year, the research team will have finished 1,280 household surveys. During the survey process, households did not have any significant challenges, and they are on schedule to complete the baseline survey of a total 3,040 households by November 2017.



In 2018, the project will complete the baseline survey and begin the follow-up survey. The research team will continue to collaborate closely with USAID mission and the PEPFAR team regarding ongoing implementation of this work.

Enabling Action on Risk: Advancing Index Insurance

PROJECT OVERVIEW

Collaborating Researchers and Institutions:

*University of California Davis
Michael Carter*

*International Labour Organisation
Pranav Prashad
End Date: May 2018*

*International Livestock Research
Institute (ILRI)
Andrew Mude
End Date: May 2019*

The Associate Award “Enabling Action on Risk: Advancing Index Insurance” was meant to close the gap that often exists between knowledge generation and large-scale project implementation.

The Global Action Network of expertise gathered lessons learned, issued best practice guidelines, and organized outreach and dissemination events. After several years of discussing the evidence that has been generated to date and the remaining gaps in knowledge or resources, the Global Action Network transitioned to creation of resource documents to fill these gaps (additional information on page 21), and dissemination of these resources to key stakeholders that have the capacity to use them.

This associate award was also designed to contribute to the design, implementation and evaluation of a large-scale index insurance program. In 2017, the AMA Innovation Lab initiated the contract with the International Livestock Research Institute (ILRI) to work together to evaluate a comprehensive social protection program in Kenya, which was designed to not only address the symptoms of poverty, but also address its causes to reduce the extent and depth of poverty. This comprehensive approach will include an Index-Based Livestock Insurance (IBLI) component, building off of previous promising results of this intervention.

This research will provide critical information to the Government of Kenya for designing and implementing a pro-graduation social protection strategy that integrates index-based insurance. In addition, the research will ask a number of important, generalizable questions around the design and implementation of integrated, efficient social protection programs for the benefit of policymakers and development agencies working to design such schemes around the world.

Global Action Network to Advance Agricultural Index Insurance

2017 KEY MILESTONES

*June 2017 Publication
“Bundling to make agriculture
insurance work”*

*Drafting of Publication
“3D Client Value Assessment Tool”
March 2018 Expected Publication*

*GAN Working Group Meeting
Geneva
October 17-18, 2017*

*Peer Learning Platform for
Policymakers
Nairobi
July 4-5, 2017*

The ILO will work with EA consultants and the University of California Davis to adjust and refine the Product Value Assessment Tool (PVAT) in response to testing and feedback. This feedback will come from feedback from the most recent GAN event in Geneva, EA Consultant’s experience implementing the tool, and the University of California Davis/Assets & Market Access Innovation Lab.

In addition, the ILO will oversee the completion of accompanying documents with EA Consultants to enable the use of the tool in the field. The AMA Innovation Lab will review and approve these documents.

The ILO will also organize a peer learning event. Some of the objectives for this workshop may include:

- Promote knowledge sharing across researchers and government, policy makers and implementing organisations (doing either action research or rigorous studies)
- Identify implications of agriculture research evidence on practice of insurance i.e. translate academic, rigorous evidence into useful and practical information that is accessible and useful for policy making and implementation
- Assist the research community to improve their understanding of the needs and realities faced by policy makers
- Identify gaps in knowledge which inform researchers on areas to focus future research
- Identify cross cutting lessons from impact studies, complemented by sharing of practice based lessons under identified themes (to be developed through mutual consultation)

The proposed workshop will be conducted in a country in West Africa where governments are keen to understand and play an active role in improving agriculture insurance services. It will build on the meeting of the Peer Learning Platform (Nairobi, July 2017) and the lessons learned therein to enhance the knowledge of both- the policy makers as well as the research community and assist in continuing dialogue that can provide better value to the agriculture producers and farmers. The anticipated timing of the event is March 2018.

Feed the Future AMA Innovation Lab Success Stories

Overview of 2017 Success Stories

2017 SUCCESS STORIES

*Success Story 1:
Finding additional learning
opportunities when disaster struck
Nepal.*

*Success Story 2:
Integrating evidence from across
the portfolio to learn more about
the impacts of soil heterogeneity in
developing countries.*

*Success Story 3:
Following where the collaborations,
resource sharing, and discussions led
to identify the need for minimum
quality standards for agricultural index
insurance - and filling that gap.*

The Feed the Future Innovation Lab for Assets and Market Access has pursued successful development impact in a number of different ways. Our organization and research selection was designed to make consistent progress toward development objectives, while still being flexible enough to follow where promising research leads us. In general, there is no one “right” way to pursue research, and our portfolio aptly highlights the myriad ways impact can be fostered.

These three success stories will not only highlight the achievements of these particular projects, but also demonstrate how our structure and approach maximizes our research’s potential for development impact.

This is why, for 2017, we have tried to identify three different types of success stories to highlight the diverse directions our research can progress – and how it can come together – to maximize the potential for development impact.

The three different success stories (models) can roughly be described as follows:

1. A single project that can investigate a wide spread of development challenges;
2. A set of projects within our portfolio that together add up to more than the sum of their parts; and,
3. A project that draws in not only projects from our own portfolio, but draws in stakeholders from across the sector to leverage resources.

To ensure accuracy and impact, academic research is often focused on singular aspects of a particular context, problem, or intervention. It is possible, however, to take a more holistic approach even when digging in to answer a specific question, and to adapt research to accommodate for unforeseen trajectories and to take advantage of unexpected learning opportunities. Our first story discusses how this can occur using the successful example of an impact evaluation of Heifer International that has been able to learn much more than the narrower focus originally envisioned.

The AMA Innovation Lab, in assembling its portfolio, seeks to identify and support projects that can add up to more than the sum of their parts. Our second success story, lays out as an example, this theory. By supporting a set of three different projects, all three of which had components of soil testing in different contexts, we were able to learn much more about soil information and inputs than we could have learned from each project individually.

Finally, we do not think that we can do it all, and do select projects and initiatives that have the potential to catalyze greater impacts outside of what we are able to do in our Lab alone. For example, through the I4 Index Insurance Innovation Initiative and the Global Action Network (GAN) to Advance Index Insurance, we are now in a position to create resources and identify critical characteristics for success, safety and efficiency for agricultural index insurance interventions.

Finding and Pursuing Opportunities for Additional Learning When They Appear

PROJECT DETAILS

This project is led by researchers at the University of Georgia and the University of Montana, along with researchers in Nepal.

Originally designed to investigate the impacts of Heifer International's intervention design, the earthquake in 2015 dramatically changed the on-the-ground situation.

In cooperation with AMA Innovation Lab researchers at the University of Georgia, the University of Montana, and the Nepa School of Business, Heifer International is cooperating with an impact evaluation of their Smallholders in Livestock Value Chain (SLVC) program in rural Nepal.

The SLVC program targets poor rural households, in particular women, to create a sustainable pathway out of poverty. SLVC is a multifaceted social protection program that encourages group formation, conducts a series of trainings, teaches women about animal husbandry and provides beneficiaries with two female goats. Newly formed self-help groups are also given a buck of improved breeding stock to improve the profitability of goat production for members.

Because previous work by our researchers and others reaching back more than a decade has demonstrated that assets are essential for poverty reduction, this component of the evaluation appealed to the AMA Innovation Lab. The evaluation also included objectives to determine whether women's empowerment and financial inclusion was enhanced by the SLVC program and if it was, why.

Research confirmed that strong social networks, improved capacity and skill sets, along with the asset transfers, all together, enabled women to become more empowered and connected to financial markets. This finding alone has important implications for any asset transfer intervention by exposing the significance of the social and human development aspect of the program.

The research team could have stopped with that; however, this project's additional successes came because researchers adapted to investigate secondary inquiries.

Building on a growing body of work within behavioral economics that is looking more closely at how aspirations could influence willingness to invest in the future, researchers put theory to the test in Nepal. They found that higher aspirations are associated with higher levels of positive future-oriented behavior, except when the gap between a person's current status and their aspirations grew too wide.



By adding in this additional element, this research suggests a potentially critical supplemental method for development interventions to expand their impact for rural households in poverty. If internal constraints like low aspirations prevent households from making investments that may one day lift them out of poverty, then interventions might be more effective by addressing internal as well as external constraints.

On April 25, 2015, a ca In cooperation with AMA Innovation Lab researchers at the University of Georgia, the University of Montana, and the Nepa School of Business, Heifer International is cooperating with an impact evaluation of their Smallholders in Livestock Value Chain (SLVC) program in rural Nepal.

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On April 25, 2015, a catastrophic 7.8 magnitude earthquake - the "Gorkha" earthquake - shook Nepal. In the wake of the earthquake, Heifer Nepal deployed a 3-fold response: immediate relief, livestock-related relief, and implementation of a revolving fund that established interest free loans to affected Heifer beneficiaries.

The research team adapted to work with Heifer Nepal to evaluate the impact of the earthquake on Heifer beneficiaries vs. non-beneficiaries. Researchers asked new questions using the earthquake as a unique chance to learn how affected populations were adapting to and showing resilience after a shock.

The benefits of individual projects may, at first, seem very singular in nature. What is important to note, is that – with high-quality researchers and thoughtful research designs – we can learn much more than we initially intend.

Synthesizing Across Contexts to Ensure Lessons Learned Remain Valid

PROJECT DETAILS

*“Evaluating the Socio-economic Impacts of Western Seed’s Hybrid Maize Program in Kenya”
University of California, Davis*

*“Evaluating the Effect of Site-Specific Soil Information on Farmer Input Choices and the Relationship Between Poverty and Soil Quality in Tanzania”
Columbia University*

*“A Multiple Interventions Approach to Increasing Technology Adoption with a View Towards Scaling Up: Evidence from Mexico”
University of California, Berkeley*

Since the 1960’s, a narrative has been building that African soils are singular and inferior to those across the rest of the developing world, and that this deficiency accounts for persistent food insecurity across the region. Publicly supported generalized recommendations for fertilizer and seed varieties that have contributed to green revolutions in Asia and Latin America have not boosted lagging yields in Africa. Is poor soil to blame?

AMA Innovation Lab research has challenged this conventional understanding, digging into the soils of Kenya, Tanzania, and Mexico in a series of projects that have successfully unearthed a different explanation for the “unresponsiveness” of these soils. Variation.

Generalized recommendations for fertilizer and seed varieties overlook differences in soil type, reducing yield gains and discouraging uptake of productive investments. Customized fertilizer and seed packages reflecting soil-specific input needs may succeed where one-size-fits-all policies have failed. Three projects supported by the Feed the Future Innovation Lab for Assets and Market Access are providing clear evidence of the need to acknowledge and identify soil variation, and to target improved seed and fertilizer interventions tailored to reflect specific soils requirements.

One AMA Innovation Lab supported project in Tanzania explored how on-site soil analysis can help farmers make better decisions. Results of field-level soil tests found considerable variation in soil nutrient deficiencies in nitrogen, phosphorus, potassium, and sulfur across farms in Morogoro. Compared to costly national-level recommendations, adapting input recommendations to soil specific needs were considerably less expensive for the average farmer.

Another project in Mexico tested whether providing small-scale farmers with input recommendations tailored to their local conditions could improve yields, along with temporary input subsidies. Researchers found that using tailored fertilizer recommendations based on the results of the in-depth soils analysis improved yields, despite adverse climactic conditions. Farmers reported yield increases between 16 and 22 percent, and some practices and input adoption also persisted in the subsequent, unsubsidized year.



In Kenya, AMA Innovation Lab researchers partnered up with the private Western Seed Company (WSC) to fine-tune maize seeds to the mid-altitude regions. Farmers who had opportunities to purchase hybrid seed developed for their agro-ecological niche increased productivity by 41% compared to farmers who only had access to generic varieties. The option to purchase WSC maize seed unambiguously increased productivity, most significantly among better-resourced farmers who had historically used hybrid seed. This suggests that financial constraints limit the impacts of even an appropriate seed technology in poorer populations.

The policy implications of this body of evidence is myriad:

- Variation may explain low technology adoption by smallholder farmers.
- Generalized input recommendations are costly and inefficient; soil variation should be taken into account to maximize impact.
- With data about local conditions, smallholder farmers will be able to maximize productivity.

While there is much research yet to be done to fully investigate the ramifications of soil variability on the ability of smallholder productivity, these three projects have made significant progress, building a strong evidence base within this field of research. Unambiguously, soil variation matters when considering food security policy.

Identifying an Essential Need for Responsible Index Insurance and Filling the Gap

PROJECT DETAILS

Index insurance has proven a financial tool to transfer debilitating risk out of low-income rural households. These results have garnered significant attention at the highest policy levels, though many barriers and technical challenges remain to realizing the full potential of index insurance and responsibly scaling it up.

With support from a USAID Associate Award, the AMA Innovation Lab is collaborating with the International Labour Organization's Impact Insurance Facility and global partners to guide this political momentum towards responsible and reliable index insurance solutions, and to close the gap that often exists between knowledge generation and large-scale projects.

Decades of research – much of it supported by the Feed the Future Innovation Lab for Assets and Market Access's Index Insurance Innovation Initiative (I4) - have developed a strong evidence base of the positive welfare impacts of index insurance on vulnerable populations of smallholder agriculturalists. When insured, vulnerable agriculturalists are less likely to resort to costly coping strategies – such as asset sales, meal reduction, or reliance on food aid, and are more likely to make productive investments.

Agricultural index insurance is a promising tool to manage some of these risks, but there is still much to learn about how to responsibly develop and scale such products for maximum development impact. It was with this in mind that the AMA Innovation Lab, in partnership with the International Labour Organization's (ILO) Impact Insurance Facility, created the Global Action Network (GAN) to advance agricultural index insurance.

The GAN was launched with the hopes that, drawing together key stakeholders and change agents, the GAN could identify key gaps in knowledge or capabilities, and then innovate to develop solutions to these problems and resources to address them. Through regular stakeholder engagement with the network over several years, by 2017 it was clear that the lack of quality standards for index-based insurance was a fundamental concern to address.

The need for quality is even more urgent, considering the recent push to expand insurance coverage for households vulnerable to the impacts of climate change, especially through initiatives such as the G7 InsuResilience initiative. Implementing low-quality products will sour consumers on the idea of insurance in general and prevent the long-term achievement of true risk management for vulnerable agriculturalists. Allowing poor insurance onto markets can severely undercut the future development of a market for good insurance

AMA Innovation Lab researchers have developed a new tool called Safe Minimum Standards (SMS) that allows index insurance industry regulators, donor organizations and implementers all to test whether an index insurance product, at a minimum, does no harm to potential clients. Through this work,



for the first time we have quantitative metrics and specific tools to assess quality of index insurance products and to compare products to one another.

Without a certification for quality, agriculturalist households have no way to tell the difference between an index insurance contract that is likely to pay out when it should from one that isn't. Without one, it can take years before a client has the opportunity of a catastrophe to tell the difference, and by then it's too late. Because it is more expensive to make high quality insurance products, and because it can take years for consumers to be able to tell that the insurance contract is low quality, there is no inherent incentive for insurers to create high-quality contracts.

Standard statistical tools and historical data from sources used to build index insurance contracts can be used to measure the two factors that contribute to this minimum quality: (1) the likelihood that the insurance will fail to pay out in the case of a loss, and (2) whether that failure to pay out happens more frequently when the losses are larger and circumstances even more dire for the farmer.

Through these partnerships, along with ongoing research and stakeholder engagement, the AMA Innovation Lab is now in a unique position to create resources and identify critical characteristics for success, safety and efficiency for agricultural index insurance interventions.

Feed the Future AMA Innovation Lab Project Reports

Smart Subsidies to Promote Peer Monitoring of Conservation Agriculture Compliance in Malawi

PROJECT DETAILS

Researchers are evaluating an incentive intervention to provide an understanding of the role interactions play in reducing monitoring costs and improving program effectiveness in Malawi.

COLLABORATIONS

Lead PI: Andrew Bell, IFPRI, New York University

Co-PI: Patrick Ward, IFPRI

Co-PI: Lawrence Mapemba, Lilongwe University

Co-PI: Tim Benton, University of Leeds

This work is being conducted in partnership with the Malawi Department of Land Resources and Conservation and the National Smallholder Farmers' Association of Malawi. It leverages funding from International Food Policy Research Institute (IFPRI), as well.

PROJECT OUTPUTS

Researchers have partnered with staff at the Millennium Challenge Corporation – Malawi, who manage the Electricity Supply Corporation

Conservation Agriculture (CA) in developing countries has the potential to promote food security and improve the environment. Adoption of CA techniques, however, has been disappointing in many developing countries. This is perhaps due to inadequately designed CA policies and insufficient economic incentives to overcome the barriers to adoption.

Current evidence suggests that adoption of CA increases with interventions that facilitate the transfer of experiential learning between farmers. In addition, institutions which create interdependence between farmers' economic decisions (and use social capital) have led to increased adoption and compliance with CA.

This research will evaluate the impact of an agglomeration bonus incentive scheme on compliance to CA in Malawi's Shire Valley basin. The agglomeration payments have two parts: a flat subsidy that induces landowners to voluntarily participate in the CA program and an agglomeration bonus paid to landowners when their land enrolled in the CA program shares a common border with a neighboring parcel also enrolled in the CA program.

By evaluating the impact of agglomeration payments on adoption of CA techniques, under different conditions of compliance monitoring, researchers hope to provide an understanding of the role that social pressures and interactions play in reducing monitoring costs and improving program effectiveness.

ACHIEVEMENTS

Researchers recently completed a three-year study in Malawi in partnership with the Malawi Department of Land Resources and Conservation (DLRC) and the National Smallholder Farmers' Association of Malawi (NASFAM) to evaluate how financial incentives affect the adoption of conservation agriculture practices among smallholder farmers.

Researchers were successful in uncovering evidence that incentives could trigger a tipping point in the number of farmers who adopt the practice,



of Malawi's efforts at managing sedimentation relating to their hydroelectric dam, to prepare a joint output on this topic.

Published paper, "Understanding compliance in programs promoting conservation agriculture: Modeling a case study in Malawi" (IFPRI s well.

leading to much broader adoption in the long run. By the end of the study, adoption rates for all conservation agriculture practices increased. At the start, adoption rates were 60 percent for intercropping, 43 percent for mulching, but only 7.6 percent for zero tillage. In final survey of 1,923 farmers, 87 percent reported intercropping, 50 percent reported crop residue mulching and 39 percent reported zero tillage. Adopting all three practices was reported by 28 percent.

Drawing on the researchers machine learning tools, they found that the most important factor that shaped the decision to adopt any of the three practices was whether neighbors had adopted them. The importance of neighbors transcended both the availability and structure of a financial incentive. In short, farmers who observed the practices providing benefits to neighbors were more likely to adopt those practices themselves.

CAPACITY BUILDING

Researchers held an in-country dissemination event entitled, "Smart Subsidies for Catchment Conservation in Malawi, a Final Project Workshop - Dissemination, Capacity, and Next Steps," held at the Bingu International Conference Center; January 16-17, 2018; Lilongwe, Malawi. The workshop objectives were to share project outputs, bring key stakeholders together to identify best next steps for CA and PES in Malawi, and introduce key project toolkits (and their pitfalls).

The event was a success bringing together a range of social science and natural science experts, as well as government ministry representatives and agro-business players to discuss concretely how to bring the theory of conservation agriculture into practice while taking into consideration the important results from this project.

LESSONS LEARNED

The researchers ongoing analysis shows that neighbors and incentives are in fact the key motivators in shaping adoption of conservation agriculture practices. In the absence of neighbors as role models, incentives are likely

necessary to encourage farmers to risk adopting conservation agriculture. However, the importance of neighbors suggests that adoption may have a tipping point beyond which further adoption is self-reinforcing, which reduces the need for financial incentives.

Though these results are not necessarily universal, in Malawi's Shire Basin they do have clear implications for the development of programs aimed at improving livelihoods, landscapes and water systems. In the sustainable land management context, the potential these practices have in reducing sedimentation in waterways could provide the basis for payments from hydropower producers to encourage small-scale farmers to adopt conservation agriculture.

Payments through this kind of program may be high upfront but are likely to decline as the benefits accrue to the small-scale farmers that adopt conservation agriculture. In time, it may be possible for these payments to be phased out. The initial investment could be a necessary step for reaching the tipping point for addressing broader challenges of land degradation.

Evaluating the Socio-Economic Impacts of Western Seed's Hybrid Maize Program in Kenya

PROJECT DETAILS

Researchers hope to learn about the effectiveness of a local seed company in developing technologies finetuned to the local environment, and the impact of relaxing liquidity constraints on technology adoption.

COLLABORATIONS

Lead PI: Michael Carter, University of California, Davis

Co-PI: Travis Lybbert, University of California, Davis

Co-PI: Mary Mathenge, Tegemeo Institute Of Agricultural Policy And Development

Associated Researcher: Timothy Njagi, Tegemeo Institute Of Agricultural Policy And Development

Associated Researcher: Samuel Bird, Emilia Tjernstrom, University of Wisconsin, Madison

PROJECT OUTPUTS

Three AMA Innovation Lab Policy Briefs:

"Diverse Soils and Inputs Challenge Recommendations to Maize Farmers

In the mid-1990s, the government of Kenya began to slowly liberalize the domestic seed market. Western Seed Company (WSC), an early entrant in the newly opened market, released its first commercial maize varieties in 1999, which quickly garnered attention by out-yielding existing varieties by 30 percent, especially in the mid-altitude regions that are home to many small-scale Kenyan farmers.

WSC subsequently attracted venture capital from AGRA and social impact investors motivated by the hypothesis that an agile, well-funded, locally-based and locally-focused seed company could create and market the technological innovations needed to boost the productivity of small-scale maize producers, and to improve their living standards.

This venture capital-powered expansion of WSC supply allows researchers to get out in front of their geographic expansion to conduct a rigorous impact evaluation. WSC itself is interested in this study and have committed to a two-year randomization design. This study will identify a mix of second-generation hybrid adopters (as hybrid users shift from other seeds to WSC seeds) and first-time hybrid seed users.

This research will investigate the welfare gains that accrue from introducing a new kind of market actor that has the incentives, capacities and focus to innovate in ways that are different from both traditional parastatals and international seed multi-nationals.

ACHIEVEMENTS

This project has been a successful example of a private/ public partnership working together to shift Kenyan agricultural practices. The local Western Seed Company, with support from the Acumen Fund, and AMA Innovation Lab researchers have uncovered important findings that will impact maize productivity.

Researchers analyzed data of 1,596 households that was collected in 2013, 2015 and 2016 in central and western Kenya under the Tegemeo/UC Davis/ Western seed randomized controlled trial (RCT).



in Kenya”

“Maize Technology Bundles and Food Security in Kenya”

“Local Seed Company Fills a Niche to Increase Maize Productivity in Kenya”

Presentation at Agrilinks webinar entitled “Soil Variation and Why It Matters”

Multiple presentations at the conference: “Enhancing Smallholder Productivity in Kenya: Evidence from a Randomized Controlled Trial of New Seed Varieties.”

In terms of food production and availability, the results indicate that bundled use of improved seed and fertilizer increase both maize yield and per-capita staple availability

in the household. The largest gains were realized when both inorganic fertilizer and improved seed were used, showing that modern farming technology wields huge potential for increasing productivity even without employing extra land resources.

In addition, research results indicate that government recommendations for seeds and fertilizer can overlook significant variations in soil quality and the availability of quality seed and fertilizer. For farmers who do adopt, this divergence between recommended and optimal inputs can lead to yields that are lower than these innovations can make possible. Acknowledging soil variability will be an important component of government-level input recommendations in the future.

CAPACITY BUILDING

One graduate student from the University of California, Davis was supported and trained under this project in fiscal year 2017, with Sam Bird advancing to candidacy in his doctoral program.

A large scale dissemination event “Enhancing Smallholder Productivity in Kenya: Evidence from a Randomized Controlled Trial of New Seed Varieties,” was held in February 2017 hosted by in county partner, the Tegemeo Institute. Researchers presented findings from this project, and panelists and participants broadened the discussion to describe comprehensive challenges and solutions to increasing smallholder maize productivity.

LESSONS LEARNED

The results from this project on soil variation shows an opportunity to target improved seed and other interventions based on the variation in soils within a village or larger geographic area. Overall, farmers will benefit from

recommendations that are more accurately tailored to their own soil quality and by ensuring that the appropriate fertilizer and seed is available in their local stores.

In areas with more variation between localities, demonstration plots and news about higher yields could help spread information through social networks. In areas with greater variation within localities, trial seed packets or subsidies may be needed to promote individual experimentation and learning, though at a potentially higher cost.

In addition, farmers in areas with high soil variation within localities need tailored recommendations on amendments and fertilizer or the information will likely not be helpful.

For variation in fertilizer and seed quality, poor storage suggests the need to educate suppliers on appropriate seed handling. Counterfeiting requires policing and verification. Sample packs of fertilizer and seed from reputable sources would provide farmers willing to risk experimenting a chance for higher yields and longer-term success.

Tailoring Contract Farming to Smallholders in Kenya

PROJECT DETAILS

This project will evaluate the potential of contract farming schemes to increase smallholder welfare, with additional experiments to test tailored insurance products and to examine ICT in the schemes.

COLLABORATIONS

Lead PI: Lorenzo Casaburi, Stanford University

Co-PI: John Shoven, Harvard University

Co-PI: Michael Kremer, Harvard University

Co-PI: Jack Willis, Harvard University

Co-PI: Alphonse Odonde, Maseno University School of Business and Economics

Collaborating Institutions: Mumias Sugar Company (MSC) and Innovations for Poverty Action (IPA)

PROJECT OUTPUTS

Working paper, "Time vs. State in Insurance: Experimental Evidence from Contract Farming in Kenya," October 2017

The shift from subsistence to cash crops and from sales on spot markets to more complex contractual arrangements is often considered an important driver of structural transformation and growth. In the developing world, including Sub-Saharan Africa, contract farming is one of the most common contractual forms through which this transition occurs. The diffusion of such schemes has been steadily increasing over the last few decades.

This research results from a long-term partnership between the research team and Mumias Sugar Company (MSC), one of the largest private sector farming schemes in East Africa. This research will evaluate a suite of interventions to assess potential impact of such schemes along several dimensions, including farmer income, technology adoption and take-up of insurance products.

First, the research team will have the rare opportunity to randomly vary participation in a contract farming scheme. In addition, they are exploring variations in the details of the contract offered to farmers in order to shed light on which features of the contract farming model drive impact.

ACHIEVEMENTS

This study successfully launched and three separate research interventions investigating: interlinking insurance and contract farming and farmer hot-lines, contract farming enrollment, and SMS-based interactive systems.

In the researchers main experiment, they offered insurance to 605 farmers and randomized the timing of the premium payment. By charging the premium as a deduction from harvest revenues in a contract farming setting, resulted in a high level of insurance take-up. In contrast, when the premium was charged up-front, take-up for the same insurance product was 67 percentage points lower.

These results show farmers do have high demand for insurance, but they have a low willingness to pay for it up-front. What's more, it was the poorest and the most liquidity constrained farmers that increased their demand the most with the change in timing.



PEDL Policy Brief “Management Information Systems and Firm Performance: Experimental Evidence from a Large Agribusiness Company in Kenya,” March 2017

Presentation on “Time vs. State in Insurance: Experimental Evidence from Contract Farming in Kenya” by co-PI Jack Willis at World Bank conference

In the SMS-based interactive system intervention, researchers found that access to the SMS project raises yields by 8% of the control group average. With a sign-up rate for the text message program of 65% in the treatment group, this implies a treatment-on-treated effect of about 11.5%. These effects are concentrated among farmers who at baseline had no agronomy training and had little interaction with company field staff. In a second round, however, the SMS intervention did not have a statistically significant impact on yields, so more research is needed to clarify the differing results.

CAPACITY BUILDING

Ongoing capacity building efforts connected with this project include:

- Course on Data Management and Analysis for partner company staff
- Research funding provided to company staff research projects on challenges and innovations for sugarcane smallholders
- In-the-field lessons and interactions with farmers to explain products and ensure proper understanding of the interventions.
- Mentoring and research funding for three graduate students (at least one woman) from Maseno University
- Provision of two degree scholarships for Masters students

LESSONS LEARNED

The results of the study may have important implications for the design of insurance products targeting smallholders in Sub-Saharan Africa and other regions. The researchers are currently working to identify other partners to run larger evaluations and test whether similar findings are obtained in other settings.

As a result of the findings from the Farmer Hotlines and SMS-based Interactive System Project, the Principal Investigator, Michael Kremer created a project called Precision Agriculture for Development (PAD), that is partly based on the findings from this study. The PAD project’s long-term goal is to develop a system that provides smallholder farmers with

individualized agricultural recommendations through their mobile phones. Through environmental monitoring, weather forecasting, satellite imagery, remote sensing, and machine learning, PAD's platform will make personalized recommendations that improve production and increase profit for farmers.

From a policy perspective, boosting crop insurance takeup is an ongoing challenge. The results from this project show that changing the timing of the premium payment is a promising idea and warrants replication in other settings. As a result, the researchers are exploring further partner and funding opportunities to run larger evaluations for the insurance study intervention.

Building Resilience and Assets for Food Security in Bangladesh

PROJECT DETAILS

This collaborative project with BRAC-Bangladesh explores how risk-reducing technology, combined with flexible financial instruments for risk management, impacts farmer welfare.

COLLABORATIONS

Lead PI: Elisabeth Sadoulet, University of California, Berkeley

Co-PI: Alain de Janvry, University of California Berkeley

Co-PI: Jeremy Magruder, University of California Berkeley

Collaborator: Dr. Mahabub Hossain, BRAC

Collaborator: Narayan Das, BRAC

Associated Researchers: Vianney Dequiedt, CERDI

PROJECT OUTPUTS

Selected papers and presentations:

“Drought resistance and water saving in rice production in Bangladesh.” SPIA Final Report. June 2017,

“Learning about short-duration rice

Bangladeshi farmers and rural inhabitants are exposed to high production risks, in particular due to frequent droughts and floods. These uninsured risks take a heavy toll on welfare, productivity, income, and asset ownership. They are a main cause of impoverishment when shocks occur, and they can keep people enmeshed in chronic poverty due to the high costs of selfinsurance.

Researchers hypothesize that traditional financial products (transfers, savings and credit) delivered by micro-finance institutions can be adapted to farmers’ and rural inhabitants’ demands for risk management and risk coping services. For this, financial products need to be made more flexible, without compromising clients’ willingness and ability to save and repay loans.

Financial products also need to be made contingent on exposure to verifiable health and weather shocks. This research will also examine whether financial products and technological innovations (stress resistant seeds) can be combined to effectively cover different layers of risk.

This study will be conducted over nine districts from the Rajshahi, Rnagur, and Khuna divisions that are particularly prone to drought, and where the new drought-tolerant technology could make a large difference in yields when drought occurs.
2017.

ACHIEVEMENTS

In the Fall of 2015, the Emergency Loan product was piloted in 12 BRAC branches. Approximately 350 loans were issued in the eight branches where the flood level triggered the loan availability (or about 21 percent of the total eligible clients in these branches).

In the winter of 2015, researchers and partners implemented the full-scale RCT across 200 branches, selected based on their exposure to flood risk and their proximity to river height gauges that are used to trigger the availability of the pre-approved Emergency Loan.

The primary findings from the past year show that being pre-approved for



in Bangladesh” At the Impacts of International Agricultural Research: Rigorous Evidence for Policy Conference, Nairobi-July 2017

“Flexible financial products”, USAID, Brownbag and Policy Workshops, Washington DC, April 2017

the Emergency Loan lead to several positive outcomes:

1. Increased the amount of land cultivated by 0.2 standard deviations. This increase was concentrated among risk adverse borrowers.
2. There was some intensification of input use among eligible borrowers, especially with pesticide application.
3. These behavioral changes increased crop production among treated clients
4. Some evidence that access to the pre-approved loan preserved levels of household consumption and livestock assets in the aftermath of a flood.
5. In August 2017 researchers launched their final round of data collection in order to capture information about the final crop sown during agricultural cycle that began in 2016. Data analysis is ongoing, with results forthcoming.

CAPACITY BUILDING

Gregory Lane, a PhD student at UC Berkeley, was sent to Bangladesh to organize the second year of the Emergency Loan RCT with a focus on improving operations processes.

Two Research Assistants were hired to visit all BRAC treatment branches to ensure that management informs borrowers about the availability of the Emergency Loans after a flood quickly and consistently. It is hoped that this assistance and pressure from management will correct some instances of poor execution seen in 2016.

LESSONS LEARNED

In the pilot run last summer, the research team found that the clients who took the Emergency Loan overwhelmingly used the capital to reinvest in their productive capacity. Farmers used the credit to purchase new seed and replant their field once the floodwaters receded, families who lost livestock repurchased cattle, and small business owners repaired their shop and purchased new stock.

These early results bring hope that the Emergency Loan will allow clients

to recover from the disaster while also maintaining their status as a good borrower.

A large flood hit Bangladesh in August 2017. To date, forty treatment branches have been activated and data analysis on the impacts of the emergency loan intervention are underway.

BRAC, the microfinance partner for this research, currently provides financial services to 5.5 million borrowers, educational services to 1.14 million children, and sanitation services to 25 million people, in 11 countries, including five Feed the Future focus countries (Bangladesh, Haiti, Liberia, Tanzania, and Uganda).

As the end-line results are analyzed and the positive preliminary results are fully supported, then this intervention has the potential to be immediately promoted at scale.

Training, Technology, and Credit in Senegal and Uganda

PROJECT DETAILS

This research will investigate the degree to which smallholder farmers make the required investments sustainable, the obstacles they face, & whether additional interventions help overcome these obstacles.

COLLABORATIONS

Lead PI: Stephen C. Smith, The George Washington University

Co-PI: Dr. Ram Fishman, GWU

Co-PI: Dr. Munshi Sulaiman, BRAC

Co-PI: Dr. Sarah Ssewanyana, EPRC

Co-PI: Dr. Abdoulaye Diagne, CRES

Investigator: Dr. Mwangi Kimenyi, Brookings Institution

Investigator: Dr. Dov Pasternak, Ben-Gurion University

Investigator: Ms. Yao Pan, The George Washington University

PROJECT OUTPUTS

Due to delays in research in Senegal, there are no formal outputs yet available.

Many technologies and improved farming practices hold great promise for boosting agricultural production and reducing poverty in developing countries, yet in Sub-Saharan Africa the adoption of such technologies has been slow. Up-front costs, lack of effective and reliable supply chains, and information gaps are clear barriers that often work together to prevent or delay technology adoption. A farmer may, for example, be reluctant to make the large, risky investments needed to invest in a new technology like fertilizer or improved seeds, but combine an initial subsidy and supply of inputs with training should, in theory, help overcome these obstacles.

Training programs and time-limited input subsidies or capital are often used to overcome barriers to farmers' technology adoption. Yet how successful are these strategies in achieving sustainable long-term adoption of improved agricultural technologies, especially after these programs cease? Do farmers continue to make the necessary complementary investments to sustain the technology usage?

This research will evaluate two separate programs in two countries, Senegal and Uganda. It will focus on the degree to which smallholder farmers make the required investments sustainable; the financial and behavioral obstacles they face in doing so; and whether additional interventions help farmers overcome these obstacles. The Uganda program (fertilizer and improved seed) exclusively targets female smallholder farmers; the Senegal program (drip irrigation for vegetable production) works with both women's farmer groups and in some cases mixed groups.

ACHIEVEMENTS

In Senegal, research has focused on irrigation, nutrition, agricultural productivity, and collective action problems.

Researchers are nearing completion of the follow up round of household and village data collection, adding information from current surveys. Analysis continues with these data to develop on the original baseline survey analysis, with a focus on the agricultural production- household nutrition linkages. In Uganda, research has focused on program sustainability and impacts of



For Uganda, a selection of outputs include:

An AMA Innovation Lab brief, entitled “Improved Seed Use and Farming Practices Sustain after Program Ends in Uganda,” released in September 2017.

A presentation at the ICED Evidence to Action conference in Kenya May 2017 on the Uganda work.

Youtube video of BRAC partner Munshi Sulaiman giving a synopsis of the Uganda project, June 2017.

randomized extension program phase-outs, as well as on the behavior of seed dealers.

Using an innovative reverse-randomized controlled trial, researchers found that three seasons after programming ended there was no decline in rates of improved seed adoption and farmers still used the program’s cultivation techniques. While these results may be unique to BRAC’s programming and the local context, the study has larger implications for determining a program’s efficient duration outside of one set by funding cycles.

CAPACITY BUILDING

The research team continues to work with MASHAV (Israel’s Agency for International Development Cooperation) in providing input into information that can be collected in the process of their upcoming joint horticulture training programs.

Two graduate students are actively working on these projects. PhD candidate Jozefina Kalaj is deeply involved with research in Senegal, and PhD Vida Bobic currently contributing to two papers in development as well as basing her job market paper investigating women’s economic empowerment and how it can be affected by agricultural interventions on this Uganda

LESSONS LEARNED

In Senegal, there have been major delays in the implementation of this project due to the slow moving nature of the government of Senegal in installing the PAPSEN irrigation systems in a sufficient number of villages to complete an impact study before the end of August 2018. Researchers have requested a no-cost extension.

In Uganda, the results show that BRAC’s programming has lasting results. Gains attributable to BRAC programming were sustainable despite a village input supply network established by the program going into decline. One of the key takeaways from this project is that a randomized phase-out approach can be used to test the sustainability of a development program’s

impacts and potentially the efficient program length.

This study makes evident a strong role for rigorous research on program and policy duration. It is far from obvious whether or when to terminate an apparently successful intervention. Additionally, decisions about duration should avoid any implicit assumptions that a program should continue for as long as the funding cycle, or that it will be sustainable after funding has run out. This is as important for practitioner organizations as it is for program funders that implicitly create incentives for duration through their structures and cycles of funding.

Disseminating Innovative Resources and Technologies to Smallholders (DIRTS) in Ghana

PROJECT DETAILS

This research project will evaluate the impacts of an intervention designed to address multiple constraints to the pervasive problem of chronic underinvestment in input technologies and risk exposure.

COLLABORATIONS

Lead PI: Mathias Fosu, Ph.D., Former Senior Research Scientist, Savanna Agricultural Research Institute

Co-PI: Dean Karlan PhD, Professor of Economics, Yale University

Co-PI: Shashidhara Kolavalli, Senior Research Fellow, International Food Policy Research Institute

Co-PI: Christopher Udry PhD, Henry J. Heinz II Professor of Economics, Yale University

PROJECT OUTPUTS

The DIRTS project has prepared and issued newsletters with basic programmatic information, produced and disseminated by partners at IPA quarterly.

Endline surveys are underway and publications to date are

In Ghana's Northern Region, smallholder farmers cultivate rain-fed crops, face significant risk of weather shocks, chronically underinvest in input technologies, achieve just a fraction of potential yields, maintain limited liquid savings, and may be food insecure.

This research project examines the barriers to smallholder farmer adoption of intensified cultivation practices and risk management tools, and measure the impact of three innovative, potentially scalable programs on farm productivity and profitability, consumption and food security, intra-household labor allocation, asset holdings and rural household resilience.

This project will use randomized controlled trial methodology to measure the impact of providing assured rural access to (1) improved information flows through Android-based extension applications, (2) improved yield input technology packages at varying prices, and (3) commercial drought index insurance at varying prices. DIRTS will be implemented with the Department of Food and Agriculture and rigorously evaluated.

ACHIEVEMENTS

Several adjustments and successes were logged within this reporting season. Field monitoring of the Agricultural Extension Agents (AEAs) located in the project's catchment areas increased with AEAs visiting project communities under their operational zone at least once a month and were made available on phone to assist Community Extension Agents when they are technically constrained in addressing farmers' queries. The AEAs as part of their field monitoring, also visit selected fields of respondents to observe the application/adoption of the messages they are receiving through the program.

Message delivery of the 2016 season took a different form from one-on-one meetings as was the practice in the first two years of the CEA program to gender segregated group meetings. This was motivated by the findings of a qualitative survey conducted in the first quarter of 2016 which revealed that farmers are more comfortable watching the extension videos in groups. Message delivery of the 2016 farming season of the program have successfully ended with a total of 8,687 maize and 8,318 legume messages successfully



*update related, and not published
results oriented materials.*

delivered. Numbers for 2017 are still being tallied.

CAPACITY BUILDING

DIRTS intensified the involvement of the Department of Agriculture particularly on the extension arm of the project which could potentially lead to the scale-up of the program by the department when the project ends. Series of District Directors of Agriculture (DDA) facilitated visits were conducted in the 13 project districts to offer the Directors the opportunity to have a first-hand experience of the CEA program.

Partner IPA collaborated with Ghana District Directors of Agriculture in the annual farmers days celebration with the theme “Agriculture: A Business Response to Economic Growth.” Stakeholder meetings took place with Officers from the Ghana Agricultural Insurance Pool (GAIP) in late December 2016 to discuss the next steps.

LESSONS LEARNED

The Follow-up survey in late 2016 sought to gauge the quality of 2015 implementation activities, particularly of the Extension and Insurance interventions. This will inform project decisions and in effect shape the implementation of the interventions. The survey covered questions on the activities of Extension and Insurance interventions and was centered on the work of Community Extension Agents (CEAs), farmers’ thoughts on the CEA intervention and Insurance payouts. Preliminary results will be released after the end of the 2017 annual survey, so no analysis had been released as of yet.

There is early data available from an additional arm of the DIRTS intervention that introduced a SMS-weather forecasting component. Researchers believe that this use of mobile technology is proving beneficial to the farmers by allowing them to plan more precisely when to plant and when to wait to capture optimal conditions based on the information they receive from SMS texts. More information will be forthcoming when the end-line survey is analyzed.

Feed the Future AMA Innovation Lab

Total of Outputs

Total Count from Projects **457**

PROJECT	Project Title	Published Academic Papers	Working Papers	Briefs/Policy Documents	Presentations	Stakeholder Meetings	External Media Coverage	Misc. Outputs
Main Awards								
Bell (NYU) - Malawi	Smart Subsidies to Promote Peer Monitoring of Conservation Agriculture Compliance in Malawi	6	1	1	1	3	1	1
Breza (Columbia) - Haiti	A Quasi-Experimental "Postmortem" Study of a Discontinued Insurance Product in Haiti	0	2	1	1	4	0	0
Carter (UCD) - Dominican Republic	USAID Climate Resilience and Index Insurance Program for Small Farmers in the Dominican Republic	1	0	2	1	1	0	0
Carter (UCD) - Kenya	Evaluating the Socio-Economics Impacts of Western Seed's Hybrid Maize Program	0	0	7	7	6	3	1
Carter (UCD) - Nepal	Feasibility Study on Agricultural Index Insurance in Nepal	0	1	4	0	4	0	2
Carter (UCD) - Tanzania	Developing a Satellite based Index to Predict Crop Yields in Smallholder Agriculture in Tanzania	1	3	2	2	1	0	0
Dillon (Michigan State) - Burkina Faso	Demand and Supply Constraints to Improved Sorghum Technology Adoption and their Gender-Differentiated Effects in Burkina Faso	1	0	3	3	8	3	1
Dillon (Univ. of Washington) - Tanzania	Communication, Search, and Mobile Phones: A Telephone Directory Intervention in Tanzania	1	0	2	1	3	1	2
Karlan-Udry (Yale) - Ghana	Disseminating Innovative Resources and Technologies to Smallholders in Ghana	0	0	12	0	10	4	1
Lybbert (UCD) - Haiti	Household-Level Impacts of Systems of Rice Intensification (SRI) in Haiti: An SRI intervention with training, insured credit, and coordination by irrigation block	0	2	3	2	2	5	1
Magnan (Univ. of Georgia) - Nepal	Evaluation of the Welfare Impacts of a Livestock Transfer Program in Nepal	0	3	5	4	3	4	1
Maljahan-Gins (UCB) - Mexico	A Multiple Interventions Approach to Increasing Technology Adoption with a View Towards Scaling-Up: Evidence from Mexico (MITA)	0	0	7	7	2	4	1
Mchomo (UCSD) - Uganda	Building Market Linkages for Smallholder Farmers in Uganda	0	0	3	3	2	6	0
Miranda (Ohio State) - Ghana	Promoting Adoption of Improved Production Technologies among Smallholders in Ghana via Coupled Credit and Insurance Contracts	0	4	4	4	6	4	1
Mobarak (Yale) - India	Selling Formal Insurance to the Informally Insured in India	1	2	3	1	3	0	3
Mude (ILRI) - Ethiopia	Index-Based Livestock Insurance in East Africa	17	12	28	42	4	33	2
Palm (Columbia) - Tanzania	Evaluating the Effects of Site-Specific Soil Information on Farmer Input Choices and the Relationship Between Poverty and Soil Quality in Tanzania	2	0	3	0	3	8	1
Sadoulet (UCB) - Bangladesh	Building Resilience and Assets for Food Security in Bangladesh	0	0	3	1	4	0	0
Shoven (Stanford) - Kenya	Tailoring Contract Farming to Smallholders in Kenya: Experimental Evidence on Enrollment Impact, Insurance Provision, and Communication Technologies	0	3	3	2	5	0	2
Smith (George Washington Univ.) - Senegal & Uganda	Complementarities of Training, Technology, and Credit in Smallholder Agriculture: Impact, Sustainability, and Policy for Scaling-up in Senegal and Uganda	3	3	3	4	6	7	2
Stonitsky (USF) - Tanzania	Rural Livelihoods and Institutional Reform in Small-Scale Fisheries in Tanzania	0	0	4	1	1	0	0
Yang (Univ. of Michigan) - Mozambique	Health, Education, and Economic Interventions for Orphans and Vulnerable Children in Mozambique	0	0	2	0	0	2	0
Associate Awards								
Carter (UCD) - Tanzania & Mozambique	Bundling Innovative Risk Management Technologies to Improve Nutritional Outcomes of Vulnerable Agricultural Households	0	0	5	0	2	1	0
Total		33	36	110	87	83	86	22

Principal Investigator, Project Location	Project Title	Website URL	# of Outputs
Bell (New York University) - Malawi	Smart Subsidies to Promote Peer Monitoring of Conservation Agriculture Compliance in Malawi	https://basis.ucdavis.edu/project/smart-subsidies-promote-peer-monitoring-conservation-agriculture-compliance-malawi	14

Title	Type of Output	Date	URL
ESPA Project Inception Workshop	Presentations	Wednesday, January 15, 2014	http://www.espa.ac.uk/files/espac/Claudiva%20Rimlinger%20-%20Presentation.pdf
Smart Subsidies to Promote Peer Monitoring of Conservation Agriculture Compliance in Malawi	Briefs/Policy Documents	Thursday, August 28, 2014	https://basis.ucdavis.edu/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Parkhurst%20Malawi.pdf
Scaling up pro-environmental agricultural practice using agglomeration payments: Proof of concept from an agent-based model	Published Academic Papers	Monday, June 27, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Bell-etal.-2016-2.pdf
Heterogeneous preferences and the effects of incentives in promoting conservation agriculture in Malawi	Published Academic Papers	Friday, January 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Ward-etal.-2016.pdf
Smart Subsidies for Catchment Conservation in Malawi	Misc. Outputs	Tuesday, April 21, 2015	https://www.ifpri.org/project/smart-subsidies-catchment-conservation-malawi
Opportunities for Improved Promotion of Ecosystem Services in Agriculture under the Water-Energy-Food Nexus	Published Academic Papers	Tuesday, February 2, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Bell-Matthews-Zhang-2016.pdf
Heterogeneous preferences and the effects of incentives in promoting conservation agriculture in Malawi	Published Academic Papers	Friday, April 15, 2016	http://www.sciencedirect.com/science/article/pii/S0167880916300779
Understanding Compliance in Programs Promoting Conservation Agriculture	Published Academic Papers	Friday, May 13, 2016	http://books.google.com/books?hl=en&lr=&id=zMoODAAAOBA&oi=fnd&pg=PR3&dq=related:_udNzIkywJscholar.google.com/&ots=VBNit3q8y&sig=3m0yc_pe6Vsw3zBJ6EVPPI0#v=onepage&q&f=false
Understanding Compliance in Programs Promoting Conservation Agriculture: Modeling a case study in Malawi	Working Papers	Tuesday, May 24, 2016	http://ageconsearch.umn.edu/handle/23556/107004
Scaling up pro-environmental agricultural practice using agglomeration payments: Proof of concept from an agent-based model	Published Academic Papers	Thursday, June 16, 2016	http://www.sciencedirect.com/science/article/pii/S0921800915302299
Professor Andrew Bell, NYU, on Smart Subsidies for Conservation Agriculture	External Media Coverage	Tuesday, December 6, 2016	https://www.youtube.com/watch?v=jx4Lle4OMFJM
2014 Quarter 2 Report	Stakeholder Meetings	Sunday, May 11, 2014	dropbox files
2014 Quarter 4 Report	Stakeholder Meetings	Monday, December 1, 2014	dropbox files
2015 Quarter 1 Report	Stakeholder Meetings	Tuesday, March 31, 2015	dropbox files

Principal Investigator, Project Location

Project Title	Website URL	# of Outputs
Breza (Columbia) - Haiti	https://basis.ucdavis.edu/project/quasi-experimental-post-mortem-study-discontinued-insurance-product-haiti	8

Title	Type of Output	Date	URL
Project Title: A Quasi-Experimental "Postmortem" Study of a Discontinued Insurance Product in Haiti	Briefs/Policy Documents	Tuesday, March 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Breza%20Haiti.pdf
A Quasi-experimental Study of a Discontinued Insurance Product in Haiti	Presentations	Saturday, November 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Breza-Emily-New-Project-Presentation.pdf
Credit Demand among Risk Sharing Groups Under Formal Insurance: Quasi-experimental	Working Papers	Wednesday, February 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/paper_240.pdf
2014 Quarter 2 Report	Stakeholder Meetings	Monday, June 30, 2014	dropbox files
2015 Quarter 4 Report	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files
Credit Demand amount risk sharing groups under formal insurance: quasi-experimental evidence from Haiti	Working Papers	Sunday, November 6, 2016	http://mit-neudt-scripts.mit.edu/2016/schedule/detailed-agenda/

Credit Demand amount risk sharing groups under formal insurance: quasi-experimental evidence from Haiti	Stakeholder Meetings	Friday, April 1, 2016	http://www.susdever.org/sessions-schedule/	# of Outputs 5
Credit Demand amount risk sharing groups under formal insurance: quasi-experimental evidence from Haiti	Stakeholder Meetings	Sunday, November 6, 2016	http://mit-neucl.scripts.mit.edu/2016/schedule/detailed-agenda/	
<p>Principal Investigator, Project Location Project Title Website URL</p>				
<p>Carter (UC Davis) - Dominican Republic USAID Climate Resilience and Index Insurance Program for Small Farmers in the Dominican Republic https://basis.ucdavis.edu/project/usaid-climate-resilience-and-index-insurance-program-small-farmers-dominican-republic</p>				

Title	Type of Output	Date	URL	# of Outputs
USAID Climate Resilience and Index Insurance Program for Small Farmers in the Dominican Republic	Briefs/Policy Documents	Wednesday, January 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/USAID-Climate-Resilience-and-Index-Insurance-for-Small-Farmers-in-the-Dominican-Republic_0.pdf	5
USAID Climate Resilience and Index Insurance Program for Small Farmers in the Dominican Republic	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Carter%20DR.pdf	
Climate Change and Adoption of Climate Change Adaptive Technologies	Presentations	Thursday, January 19, 2017	https://basis.ucdavis.edu/project/usaid-climate-resilience-and-index-insurance-program-small-farmers-dominican-republic	
Programa de resiliencia climática y seguro basado en índices para pequeños productores en la República Dominicana	Published Academic Papers	Wednesday, January 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/USAID-Climate-Resilience-and-Index-Insurance-for-Small-Farmers-in-the-Dominican-Republic_SPA-CDIRCorregido_0.pdf	
2014 Quarter 2 Report	Stakeholder Meetings	Saturday, March 1, 2014	dropbox files	

<p>Principal Investigator, Project Location Project Title Website URL</p>				
<p>Carter (UC Davis) - Kenya Evaluating the Socio-economic Impacts of Western Seed's Hybrid Maize Program in Kenya https://basis.ucdavis.edu/project/evaluating-socio-economic-impacts-western-seeds-hybrid-maize-program-kenya</p>				

Title	Type of Output	Date	URL	# of Outputs
Learning By-Doing vs Learning-from-Others: Heterogeneity Matters	Briefs/Policy Documents	Friday, March 20, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Tjermstrom-Brief.pdf	24
Spurring Technological Innovation and Poverty Reduction? Evaluating the Impact of a New Seed Market Actor in Kenya	Briefs/Policy Documents	Saturday, March 15, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Carter_WesternSeed1.pdf	
One Change to Hybrid Seeds that Could Boost Maize Productivity in Western Kenya	Misc. Outputs	Tuesday, August 29, 2017	https://basis.ucdavis.edu/news/one-change-hybrid-seeds-could-boost-maize-productivity-western-kenya	
Evaluating the Socio-economic Impacts of Western Seed Company's Hybrid Maize Program in Kenya	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Carter%20WSC.pdf	
Evaluating the Socioeconomic Impacts of Western Seed's Hybrid Maize Program	Briefs/Policy Documents	Thursday, January 1, 2015	https://www.povertyactionlab.org/es/node/11173	
Evaluating the Socio-economic Impacts of Western Seed Hybrid Maize Program	External Media Coverage	Friday, January 1, 2016	http://cega.berkeley.edu/evidence/evaluating-the-socio-economic-impacts-of-western-seed-hybrid-maize-program/	
Evaluating the Socio-economic Impacts of Western Seed's Hybrid Maize Program	External Media Coverage	Thursday, July 31, 2014	https://www.socialscienceregistry.org/trials/443	
Evaluating the Socio-economic Impacts of Western Seed's Hybrid Maize Program	External Media Coverage	Friday, January 1, 2016	http://crsps.net/resource/evaluating-the-socio-economic-impacts-of-western-seeds-hybrid-maize-program/	
Policy Brief: Maize Technology Bundles and Food Security in Kenya	Briefs/Policy Documents	Wednesday, February 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/AMA%20Brief%20-%20WSC%20technology%20bundles%20-%202017-02.pdf	
Event Highlights Challenges and Opportunities for Increasing Maize Productivity in Kenya	Stakeholder Meetings	Thursday, February 9, 2017	https://basis.ucdavis.edu/news/event-highlights-challenges-and-opportunities-increasing-maize-productivity-kenya	

Local Seed Company Fills a Niche to Increase Maize Productivity in Kenya	Briefs/Policy Documents	Sunday, January 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/AMA%20Brief%20-%20W5C%20maize%20productivity%20-%202017-01.pdf	# of Outputs 11
Constraints to adoption - Learning in Highly Variable Environments	Presentations	Wednesday, February 8, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Tjemstrom_learning.pdf	
Filling a Niche	Presentations	Wednesday, February 8, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Carter_Filling_a_Niche1.pdf	
Diversity in Maize Production Environments and Practices in Kenya	Presentations	Wednesday, February 8, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Diversity%20in%20Maize%20Production%20Environments%20and%20Practices.pdf	
Adoption of Maize Technology Bundles: Implications on Productivity on Food Security	Presentations	Wednesday, February 8, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Tim_maize%20bundles.pdf	
Comments on "Soil Fertility and Impacts for Improved Agricultural Technology"	Presentations	Thursday, November 6, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Comments_Dillon.0.pdf	
Evaluating the Socio-economic Impacts of Western Seed's Hybrid Maize Program	Presentations	Thursday, November 6, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Comments_Dillon.pdf	
Signals, Similarities and Seeds: Social Learning in the Presence of Imperfect Information and Heterogeneity	Presentations	Thursday, November 6, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Tjemstrom-Emilia-Research-Paper-Presentation.pdf	
Webinar: Soil Variation and Why It Matters	Stakeholder Meetings	Thursday, June 29, 2017	https://basis.ucdavis.edu/events/webinar-soil-variation-and-why-it-matters	
Enhancing Smallholder Productivity in Kenya: Evidence from a Randomized Controlled Trial of New Seed Varieties	Stakeholder Meetings	Wednesday, February 8, 2017	https://basis.ucdavis.edu/past-event/enhancing-smallholder-productivity-kenya-evidence-randomized-controlled-trial-new-seed	
Diverse Soils and Inputs Challenge Recommendations to Maize Farmers in Kenya	Briefs/Policy Documents	Wednesday, February 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/AMA%20Brief%20-%20soil%20variation%20-%202017-03.pdf	
2014 Quarter 4 Report	Stakeholder Meetings	Wednesday, December 31, 2014	dropbox files	
2015 Quarter 2 Report	Stakeholder Meetings	Tuesday, June 30, 2015	dropbox files	
2015 Quarter 4 Report	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files	

Principal Investigator, Project Location
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Carter (UC Davis) - Nepal
 Agricultural Insurance in Nepal
<https://basis.ucdavis.edu/project/agricultural-insurance-nepal>

Title	Type of Output	Date	URL
Feasibility Study on Agricultural Index Insurance in Nepal: Work Plan and Budget	Briefs/Policy Documents	Wednesday, October 28, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Work-Plan-May-2014.pdf
Feasibility Study on Agricultural Index Insurance in Nepal: Preliminary Final Report	Working Papers	Thursday, October 1, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/2015-10-28-Draft-Final-Report_Nepal_small-1.pdf
Index Insurance Feasibility Study & Proposed Next Steps	Misc. Outputs	Monday, February 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/2016-02-Index-Insurance-Summary-FINAL.pdf
Field Trip Report (Final)	Misc. Outputs	Thursday, May 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/IBASIS-Trip-Report-Final.pdf
Feasibility Study on Agricultural Insurance in Nepal	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Carter%20Nepal.pdf
Innovations to Improve Index Insurance Quality for Small Scale Agriculturalists	Briefs/Policy Documents	Tuesday, August 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-08/AMA%20Success%20Story%20-%20July%202017%20index%20contract.pdf
Village Insurance-savings Accounts (VISAs)	Briefs/Policy Documents	Wednesday, February 1, 2017	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Policy%20brief-VISA%20model.pdf
2014 Quarter 2 Report	Stakeholder Meetings	Thursday, May 29, 2014	dropbox files
2014 Quarter 2 Report	Stakeholder Meetings	Wednesday, May 28, 2014	dropbox files
2014 Quarter 2 Report	Stakeholder Meetings	Thursday, May 29, 2014	dropbox files
2016 Conversation Report	Stakeholder Meetings	Wednesday, July 27, 2016	dropbox files

Principal Investigator, Project Location
Project Title
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Carter (UC Davis) - Nepal
 Agricultural Insurance in Nepal
<https://basis.ucdavis.edu/project/agricultural-insurance-nepal>

Title	Type of Output	Date	URL	# of Outputs
Feasibility Study on Agricultural Index Insurance in Nepal: Work Plan and Budget	Briefs/Policy Documents	Wednesday, October 28, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-02/WorkPlan-May-2014.pdf	11
Feasibility Study on Agricultural Index Insurance in Nepal: Preliminary Final Report	Working Papers	Thursday, October 1, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-02/2015-10-28-Draft-Final-Report_Nepal_small-1.pdf	
Index Insurance Feasibility Study & Proposed Next Steps Field Trip Report (Final)	Misc. Outputs	Monday, February 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-02/2016-02-Index-Insurance-Summary-FINAL.pdf	
Feasibility Study on Agricultural Insurance in Nepal	Misc. Outputs	Thursday, May 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-01/BASIS_Trip-Report-Final.pdf	
Innovations to Improve Index Insurance Quality for Small Scale Agriculturalists	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-03/AMA%20Thumbnail-Carter%20Nepal.pdf	
Village Insurance-savings Accounts (VISAs)	Briefs/Policy Documents	Tuesday, August 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-08/AMA%20Success%20Story%20-%20July%202017%20Index%20contract.pdf	
2014 Quarter 2 Report	Briefs/Policy Documents	Wednesday, February 1, 2017	http://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-02/Policy%20Brief-VISA%20model.pdf	
2014 Quarter 2 Report	Stakeholder Meetings	Thursday, May 29, 2014	dropbox files	
2014 Quarter 2 Report	Stakeholder Meetings	Wednesday, May 28, 2014	dropbox files	
2016 Conversation Report	Stakeholder Meetings	Thursday, May 29, 2014	dropbox files	
	Stakeholder Meetings	Wednesday, July 27, 2016	dropbox files	

Principal Investigator, Project Location
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Carter/Fianes (UC Davis) - Tanzania
 Developing a Satellite-based Index to Predict Crop Yields in Smallholder Agriculture in Tanzania
<https://basis.ucdavis.edu/project/developing-satellite-based-index-predict-crop-yields-smallholder-agriculture-tanzania>

Title	Type of Output	Date	URL	# of Outputs
Fail-safe index insurance without the cost: a satellite based conditional audit approach (rough)	Working Papers	Saturday, August 15, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-01/Satellite_based_conditional_audit_index_insurance_150815.pdf	9
Fail-safe index insurance without the cost: a satellite based conditional audit approach	Working Papers	Friday, February 17, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-05/Satellite_based_conditional_audit_index_insurance_170217.pdf	
BASIS AMA Research Program	Presentations	Tuesday, March 5, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-04/Tues-M-12-Steinmetz-BASIS-AMA.pdf	
Using satellite information to predict local yields	Presentations	Thursday, July 19, 2012	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-01/ISI-Corp-Presentation2.pdf	
Developing a Satellite based Index to Predict Crop Yields in Smallholder Agriculture in Tanzania	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-03/AMA%20Thumbnail-Carter%20Tanzania.pdf	
Developing a Satellite based Index to Predict Crop Yields in Smallholder Agriculture	Briefs/Policy Documents	Tuesday, January 1, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-01/Proposal-Insurance-Index-Design-for-TZ-v131219-3.1.pdf	
2014 Quarter 2 Report	Stakeholder Meetings	Monday, June 30, 2014	dropbox files	
Climate Change and Multi-Dimensional Sustainability in African Agriculture	Published Academic Papers	Wednesday, November 23, 2016	https://books.google.com/books?id=3xrRDOAQBAI&pg=PA568&dq=tanzania+flames&source=blots=s:MnkXXmetroG&sig=f0gQPdEnLxSq4hP84hGvT0mjPMhI=en&as=X&ved=0ahUKwK64fcpJDSAiVhlmMKHRFPBB4Q6AEIODA&fvc=onepage&q=tanzania%20flames.&f=false	
The Role of Collateral in Joint Liability Group Lending: Evidence from a Framed Field Experiment in Tanzania	Working Papers	Thursday, August 13, 2015	https://arefiles.ucdavis.edu/uploads/filer_public/d0/d0cdafe7-bea4-4242-a47a-18bca08df9de/role_of_collateral_in_group_lending_-_je_flames_-_150813-1.pdf	

Principal Investigator, Project Location Project Title Website URL	Type of Output	Date	URL	# of Outputs
Dillon (Michigan State) - Burkina Faso Demand and Supply Constraints to Improved Sorghum Technology Adoption and their Gender-Differentiated Effects in Burkina Faso https://basis.ucdavis.edu/project/demand-and-supply-constraints-improved-sorghum-technology-adoption-and-their-gender	Published Academic Papers	Thursday, January 1, 2015	http://www.tandfonline.com/doi/pdf/10.1080/00220388.2015.1036036	19
Demand and Supply Constraints to Improved Sorghum Technology Adoption and their Gender-Differentiated Effects in Burkina Faso	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnksk466/files/2017-03/AMA%20Thumbnail-A%20Dillon%20Burkina%20Faso.pdf	
Beliefs and Behavior	Presentations	Friday, September 13, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnksk466/files/2017-03/Beliefs-and-Behavior.pdf	
Demand and Supply Constraints to Improved Sorghum Technology Adoption and their Gender-Differentiated Effects in Burkina Faso	Presentations	Monday, July 1, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnksk466/files/2017-03/dillon.pdf	
Professor Andrew Dillon, Michigan State University, on his research project in Burkina Faso	External Media Coverage	Wednesday, December 7, 2016	https://www.youtube.com/watch?v=KwB_qpSNA08	
Professor Andrew Dillon, Michigan State University, on his research project in Burkina Faso	External Media Coverage	Wednesday, December 7, 2016	https://www.youtube.com/watch?v=KwB_qpSNA08	
Professor Andrew Dillon, Michigan State University at the Mind the GAP Workshop	External Media Coverage	Thursday, November 10, 2016	https://www.youtube.com/watch?v=Vf1mvm_u8TGO	
Mind the Gap: Exploring the Disparities between Smallholder Farmer Practice and Potential	Stakeholder Meetings	Thursday, November 3, 2016	https://basis.ucdavis.edu/events/mind-gap-exploring-disparities-between-smallholder-farmer-practice-and-potential	
2013 BASIS/14 Technical Committee Meeting	Stakeholder Meetings	Thursday, September 12, 2013	https://basis.ucdavis.edu/events/2013-basis14-technical-committee-meeting	
2014 Quarter 1 Report	Stakeholder Meetings	Monday, March 31, 2014	dropbox files	
2014 Quarter 2 Report	Stakeholder Meetings	Monday, June 30, 2014	dropbox files	
2014 Quarter 4 Report	Stakeholder Meetings	Wednesday, December 31, 2014	dropbox files	
2015 Quarter 1 Report	Stakeholder Meetings	Tuesday, March 31, 2015	dropbox files	
2015 Quarter 2 Report	Stakeholder Meetings	Tuesday, June 30, 2015	dropbox files	
2015 Quarter 4 Report	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files	
Demand and Supply Constraints to Improved Sorghum Technology Adoption and their Gender-Differentiated Effects in Burkina Faso (Proposal)	Briefs/Policy Documents	Sunday, December 1, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnksk466/files/2017-01/Dillon_Andrew_BurkinaFaso.pdf	
Increasing Sorghum Technology Adoption in Burkina Faso	Briefs/Policy Documents	Friday, August 1, 2014	http://basis.ucdavis.edu/sites/g/files/dgvnksk466/files/2017-01/Dillon_Andrew_BurkinaFaso.pdf	
Contraintes de Demande et d'offre Libeées à l'adoption de l'engrais	Presentations	Wednesday, November 30, 2016	http://www.poverty-action.org/sites/default/files/presentation/Contraintes%20de%20demande%20et%20offre%20lie%20a%20la%20C%80%20%27adoption%2011302016%20%282%29.pdf	
Inclusion Financiere et Agriculture/Financial Inclusion and Agriculture	Misc. Outputs	Tuesday, November 29, 2016	http://www.poverty-action.org/event/inclusion-financiere%20re-agriculture-financial-inclusion-and-agriculture	
Principal Investigator, Project Location Project Title Website URL				
Dillon (University of Washington) - Tanzania Communication, Search, and Mobile Phones: A Telephone Directory Intervention in Tanzania https://basis.ucdavis.edu/project/communication-search-and-mobile-phones-a-telephone-directory-intervention-tanzania				
Communication, Search, and Mobile Phones: A Telephone Directory Intervention in Tanzania (proposal)	Briefs/Policy Documents	Saturday, February 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnksk466/files/2017-01/BASIS-scope-of-work.pdf	10
Brian Dillon Awarded Funding for Communication, Search, and Mobile Phones: A Telephone Directory Intervention in Tanzania	External Media Coverage	Friday, July 25, 2014	https://evans.uw.edu/faculty-research/news/brian-dillon-awarded-funding-communication-search-and-mobile-phones-telephone	
Communication, Search and Mobile Phones	Presentations	Friday, November 7, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnksk466/files/2017-03/Dillon-Brian-New-Project-Presentation.pdf	
Communication, Search, and Mobile Phones: A Telephone Directory Intervention in Tanzania	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnksk466/files/2017-03/AMA%20Thumbnail-Dillon%20Tanzania.pdf	

Communication, Search, and Mobile Phones: A Telephone Directory Intervention in Tanzania	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20ThumbnaIl-Dillon%20anznia.pdf
The Promise (and pitfalls) of ICT for Agriculture Initiatives	Published Academic Papers	Saturday, November 19, 2016	http://onlinelibrary.wiley.com/doi/10.1111/agc.12301/full
Jenny C. Aker - Field Projects	Misc. Outputs	Sunday, February 21, 2016	http://sites.ufts.edu/jennyaker/field-projects-in-africa/
Marc Lindenberg Center for Humanitarian Action, International Development, & Global Citizenship	Misc. Outputs	Monday, August 1, 2016	https://evans.uw.edu/center-projects/mlc/marc-lindenberg-center-humanitarian-action-international-development-global
2015 Quarter 1 Report	Stakeholder Meetings	Tuesday, March 31, 2015	dropbox files
2015 Quarter 2 Report	Stakeholder Meetings	Tuesday, June 30, 2015	dropbox files
2015 Quarter 4 Report	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files

Principal Investigator, Project Location
Project Title
Website URL

Karian-Udry (Yale) - Ghana
 Disseminating Innovative Resources and Technologies to Smallholders in Ghana (DIRTS)
<https://basis.ucdavis.edu/project/disseminating-innovative-resources-and-technologies-smallholders-ghana-dirts>

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Title	Type of Output	Date	URL
Disseminating Innovative resources and technologies to smallholders in ghana (Thumbnail)	Briefs/Policy Documents	Wednesday, June 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20ThumbnaIl-Udry%20Ghana.pdf
Innovative Resources and Technologies to Smallholders in Ghana	Misc. Outputs	Wednesday, January 1, 2014	http://basis.ucdavis.edu/wp-content/uploads/2016/09/Udry-Ghana.pdf
Disseminating Innovative Resources and Technologies to Smallholders (DIRTS) in Northern Region, Ghana (Proposal)	Briefs/Policy Documents	Wednesday, January 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Udry-Proposal.pdf
Disseminating Innovative Resources and Technologies to Smallholders (DIRTS) in Northern Region, Ghana (Summary)	Briefs/Policy Documents	Wednesday, June 8, 2016	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Udry_DIRTS_Gham.pdf
Event to Launch Agriculture Technology Access Project	External Media Coverage	Monday, July 14, 2014	http://www.poverty-action.org/event/event-launch-agriculture-technology-access-project
Planet Money: The Risk Farmers	External Media Coverage	Wednesday, September 7, 2016	http://www.npr.org/sections/money/2016/09/07/492988779/episode-723-the-risk-farmers
Disseminating Innovative Resources and Technologies to Smallholder Farmers in Ghana	External Media Coverage	Wednesday, June 1, 2016	http://www.poverty-action.org/study/disseminating-innovative-resources-and-technologies-smallholder-farmers-ghana
Community Extension Agent Update - July 2014	Briefs/Policy Documents	Tuesday, July 1, 2014	http://www.poverty-action.org/sites/default/files/dirts_cea_update_july.pdf
Community Extension Agent Update - August 2014	Briefs/Policy Documents	Friday, August 1, 2014	http://www.poverty-action.org/sites/default/files/dirts_cea_update_august_2014.pdf
Community Extension Agent Update - September 2014	Briefs/Policy Documents	Monday, September 1, 2014	http://www.poverty-action.org/sites/default/files/dirts_cea_update_september_2014.pdf
DIRTS Newsletter - December 2014	Briefs/Policy Documents	Monday, December 1, 2014	http://www.poverty-action.org/sites/default/files/dirts_update_december_2014.pdf
DIRTS Newsletter - March 2015	Briefs/Policy Documents	Sunday, March 1, 2015	http://www.poverty-action.org/sites/default/files/dirts_update_march_2015_0.pdf
DIRTS Newsletter - June 2015	Briefs/Policy Documents	Monday, June 1, 2015	http://www.poverty-action.org/sites/default/files/dirts_quarterly_update_YZq2_0.pdf
DIRTS Newsletter - September 2015	Briefs/Policy Documents	Tuesday, September 1, 2015	http://www.poverty-action.org/sites/default/files/DIRTS%20Y2Q3%20Newsletter%20final_0.pdf
DIRTS Newsletter - December 2015	Briefs/Policy Documents	Tuesday, September 1, 2015	http://www.poverty-action.org/sites/default/files/DIRTS%20Y2Q4%20Newsletter.pdf
DIRTS Newsletter - January/June 2016	Briefs/Policy Documents	Wednesday, June 1, 2016	http://www.poverty-action.org/sites/default/files/DIRTS%20quarterly%20update_Y3Q2.pdf
Digging For Answers: Examining the Effects of Rainfall Index Insurance for Farmers in Ghana	External Media Coverage	Monday, February 2, 2015	https://www.youtube.com/watch=DWWWx2ih-b3v4&feature=youtu.be
2014 Quarter 2 Report	Stakeholder Meetings	Saturday, March 1, 2014	dropbox files
2014 Quarter 2 Report	Stakeholder Meetings	Saturday, March 1, 2014	dropbox files
2014 Quarter 2 Report	Stakeholder Meetings	Saturday, February 1, 2014	dropbox files
2014 Quarter 2 Report	Stakeholder Meetings	Saturday, February 1, 2014	dropbox files
2014 Quarter 2 Report	Stakeholder Meetings	Monday, July 1, 2013	dropbox files
2014 Quarter 4 Report	Stakeholder Meetings	Saturday, November 1, 2014	dropbox files
2014 Quarter 4 Report	Stakeholder Meetings	Saturday, November 1, 2014	dropbox files
2014 Quarter 4 Report	Stakeholder Meetings	Saturday, November 1, 2014	dropbox files
2014 Quarter 4 Report	Stakeholder Meetings	Wednesday, October 1, 2014	dropbox files
2015 Quarter 4 Report	Stakeholder Meetings	Tuesday, December 1, 2015	dropbox files

Principal Investigator, Project Location Project Title Website URL		Type of Output	Date	URL	# of Outputs
Lybbert (UC Davis) - Haiti Household-level Impacts of System of Rice Intensification (SRI) in Haiti https://basis.ucdavis.edu/project/household-level-impacts-system-rice-intensification-sri-haiti		Briefs/Policy Documents	Wednesday, October 1, 2014	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Lybbert-Travis_0.pdf	15
Household-Level Impacts of System of Rice Intensification (SRI) in Haiti: An SRI Intervention with Training, Insured Credit, and Coordination with Irrigation Block		Briefs/Policy Documents	Wednesday, June 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Lybbert%20Haiti.pdf	
Costs and Benefits of Improving Rice Yields for Farmers in Haiti		External Media Coverage	Wednesday, May 3, 2017	http://blogs.ucdavis.edu/egghed/2017/05/03/costs-benefits-improving-rice-yields-farmers-haiti/	
UC Davis Professor: Travis Lybbert speaks on improving rice yields in Haiti		External Media Coverage	Thursday, May 4, 2017	https://www.youtube.com/watch?v=G7eXi_Zy5dk&feature=youtu.be	
Household-Level Impacts of System of Rice Intensification (SRI) in Haiti: An SRI Intervention with Training, Insured Credit, and Coordination by Irrigation Block (Proposal)		Briefs/Policy Documents	Friday, February 1, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Lybbert-Proposal.pdf	
Evaluating & Learning in Haiti: Household Impacts of SRI		Presentations	Monday, February 22, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Oxfam-Brownbag-Feb-2016.pdf	
Presentation: Household-level Impacts of System of Rice Intensification (SRI) in Haiti		Presentations	Monday, February 22, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Haiti.pdf	
System of Rice Intensification (SRI) in Haiti: Agronomic Effects & Household Impacts		Stakeholder Meetings	Thursday, December 8, 2016	https://basis.ucdavis.edu/past-events/system-rice-intensification-sri-haiti-agronomic-effects-household-impacts	
Collective Action in Games as in Life: Experimental Evidence from Canal Cleaning in Haiti		Working Papers	Tuesday, September 29, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Turiansky-Abbie_imp_0929.pdf	
Demystifying a Rice Revolution		External Media Coverage	Thursday, May 9, 2013	http://politicsandpoverty.oxfamamerica.org/2013/05/demystifying-a-rice-revolution/	
SRI International Network and Research Center		External Media Coverage	Wednesday, May 1, 2013	http://sri.cals.cornell.edu/countries/haiti/index.html	
How Agricultural Priorities Could Help Haiti		External Media Coverage	Monday, April 24, 2017	http://www.huffingtonpost.com/entry/how-agricultural-priorities-could-help-haiti_us_58fe1ad7e4b0420a999a3c	
Collective Action in Games as in Life: Experimental Evidence from Canal Cleaning in Haiti		Working Papers	Sunday, January 17, 2016	http://blog.surveycro.com/wp-content/uploads/2016/07/Turiansky_imp_0117.pdf	
Presentation on Theme: "Evaluating & Learning in Haiti: Household Impacts of SRI"		Misc. Outputs	Monday, February 22, 2016	http://slideplayer.com/slide/10455079/	
2016 Quarter 2 Report		Stakeholder Meetings	Thursday, June 30, 2016	dropbox files	

Principal Investigator, Project Location Project Title Website URL		Type of Output	Date	URL	# of Outputs
Mahajan-Gine - Mexico, Kenya A Multiple Interventions Approach to Increasing Technology Adoption with a View Towards Scaling-Up in Mexico and Kenya https://basis.ucdavis.edu/project/multiple-interventions-approach-increasing-technology-adoption-view-towards-scaling		Briefs/Policy Documents	Wednesday, October 1, 2014	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/BASIS-Update-Mahajan.pdf	21
Identifying the Root Causes of Low Technology Adoption Amongst Maize Growers in Mexico (Update)		Briefs/Policy Documents	Wednesday, October 1, 2014	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/BASIS-Update-Mahajan.pdf	
A Multiple Interventions Approach to Increasing Technology Adoption with a View Towards Scaling-up: Evidence from Mexico		Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Mahajan%20Mexico.pdf	
Identifying the Root Causes of Low Technology Adoption Amongst Maize Growers in Mexico		Briefs/Policy Documents	Wednesday, October 1, 2014	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Mahajan_Apajite-Mexico.pdf	
A Multiple Interventions Approach to Increasing Technology Adoption with a View (proposal)		Briefs/Policy Documents	Monday, October 1, 2012	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Mahajan_Proposal.pdf	
Carolina Corral speaks (in Spanish) about soils and research in Mexico and Kenya		External Media Coverage	Monday, August 14, 2017	https://www.youtube.com/watch?v=Nx9MjPdJdIc&feature=youtu.be	

Restrictions on Technology Adoption in Agriculture	External Media Coverage	Friday, January 1, 2016	http://qfd.org.mx/?page_id=250
Soil Analysis Program	Briefs/Policy Documents	Friday, January 1, 2016	http://qfd.org.mx/?page_id=274
MITA Public Data (dropbox)	Misc. Outputs	Friday, January 1, 2016	https://www.dropbox.com/s/1v8baafkx5ggh/ADiu146SNTYb2GFkfczvaal?dl=0
Agriculture Extension Program and Foliar Fertilization	Briefs/Policy Documents	Friday, January 1, 2016	http://qfd.org.mx/?page_id=281
A Multiple Interventions Approach to Increasing Technology Adoption with a View (Presentation)	Presentations	Friday, November 7, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Mahajan-Aprajit-Research-Paper-Presentation.pdf
Webinar: Soil Variation and Why It Matters	Stakeholder Meetings	Thursday, June 29, 2017	https://basis.ucdavis.edu/events/webinars/soil-variation-and-why-it-matters
Fertilizer Recommendations and In-kind Subsidies Increase Uptake and Yields Among Maize Farmers in Mexico	Briefs/Policy Documents	Thursday, June 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-06/AMA%20Brief%20-%20Mahajan%20Mexico%20Soil%20Testing%20-%202017-09.pdf
A Multiple Interventions Approach to Increasing Technology Adoption: Evidence from Mexico	Presentations	Friday, July 12, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-04/Mahajan.pdf
Agrilinks Webinar: Soil Variation and Why It Matters, Additional Presentation Transcript	Presentations	Thursday, June 29, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-08/soils_presentation_audio_transcript_0.pdf
Agrilinks Webinar: Soil Variation and Why It Matters, Chat Transcript	Presentations	Thursday, June 29, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-08/soils_presentation_chat_transcript.pdf
Precision Agriculture for Development	Presentations	Saturday, May 20, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-05/24_Corrala.pdf
Agrilinks Webinar: Soil Variation and Why It Matters, Questions & Answers	Presentations	Thursday, June 29, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-08/soils_qa_audio_transcript_0.pdf
A Multiple Interventions Approach to Increasing Technology Adoption: Evidence from Mexico	External Media Coverage	Friday, January 1, 2016	http://www.3ieimpact.org/en/evidence/impact-evaluations/details/726/
Gerardo Basilio Shares his Experience in the MITA Programme	External Media Coverage	Wednesday, August 10, 2016	https://www.youtube.com/watch?v=M3uomf6YXlg
2015 Quarter 4 Report	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files

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Principal Investigator, Project Location
Project Title
Website URL

Title	Type of Output	Date	URL
Professor Sarah, Montana State University, Speaks About an Evaluation of Heifer International	External Media Coverage	Wednesday, December 7, 2016	https://www.youtube.com/watch?v=gufVYqpw_3
Resilience in the Wake of Disaster: Studying the impact of post-earthquake interest free loans on Resilience in Nepal	Briefs/Policy Documents	Friday, June 10, 2016	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Magnan-Earthquake.pdf
Evaluation of the Welfare Impacts of a Livestock Transfer Program in Nepal	Briefs/Policy Documents	Wednesday, June 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Magnan%20Nepal.pdf
How Considering Aspirations can Shape Better Development Interventions and Policy	Briefs/Policy Documents	Saturday, April 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-04/AMA%20Success%20Story%20-%20April%202017%20Aspirations.pdf
Opinion: 5 Lessons from research in the wake of an earthquake in Nepal	External Media Coverage	Thursday, May 11, 2017	https://www.devex.com/news/opinion-5-lessons-from-research-in-the-wake-of-an-earthquake-disaster-in-nepal-90149
Opinion: 5 Lessons from research in the wake of an earthquake in Nepal	External Media Coverage	Thursday, May 11, 2017	http://www.preventionweb.net/news/view/53046
A Livestock Transfer Program Increases Women's Empowerment and Financial Inclusion in Nepal	Briefs/Policy Documents	Saturday, April 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-04/AMA%20Brief%20-%20Janzen%20Nepal.pdf
Risk Management Tools for Agricultural Growth and Resilience	Presentations	Monday, March 10, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-05/IBLI-Impact-Slides.pdf
Research Shows Hope Amid Destruction	External Media Coverage	Tuesday, April 25, 2017	https://www.heifer.org/join-the-conversation/blog/2017/April/research-shows-hope-amid-destruction.html
Evaluation of the Welfare Impacts of a Livestock Transfer Program in Nepal	Presentations	Friday, November 7, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Magnan-Nick-New-Project-Presentation.pdf
Social Drivers of Aspirations Formation and Failure in Rural Nepal	Working Papers	Monday, April 4, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/aspirations_v2-combined.pdf
Social Drivers of Aspirations Formation and Failure in Rural Nepal (Presentation)	Presentations	Friday, April 15, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Aspirations-Magnan-UJMN.pdf

Evaluation of the Welfare Impacts of a Livestock Transfer Program in Nepal (Proposal)	Briefs/Policy Documents	Thursday, May 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk4466/files/2017-01/Final-BASIS-Proposal.pdf
Aspirations and Failure in Rural Nepal	Working Papers	Wednesday, August 10, 2016	http://www.montana.edu/sjanzsen/aspirationsnepal.pdf
Reports and Studies: Evaluation of the Welfare Impacts of a Livestock Transfer Program in Nepal	Misc. Outputs	Thursday, May 1, 2014	https://www.heifer.org/ending-hunger/our-impact/reports.html
Annual Innovation Lab Council Partners Workshop: Nepal, March 10-14, 2014	Presentations	Monday, March 24, 2014	http://crsps.net/2014/03/feed-the-future-innovation-labs-annual-meeting-nepal-march-10-14-2014/
Aspirations Formation and Failure in Rural Nepal (Draft)	Working Papers	Friday, October 14, 2016	http://mit-neu.edu/scripts.mit.edu/2016/wp-content/uploads/2016/03/paper_168.pdf
Scaling Up Agricultural Research and Technologies & Designing Research for Improved Nutritional Outcomes	Stakeholder Meetings	Monday, March 10, 2014	https://basis.ucdavis.edu/events/scaling-agricultural-research-and-technologies-designing-research-improved-nutritional
2014 Quarter 4 Report	Stakeholder Meetings	Wednesday, December 31, 2014	dropbox files
2015 Quarter 4 Report	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files

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Principal Investigator, Project Location
McIntosh (UC San Diego) - Uganda

Project Title
Building Market Linkages for Smallholder Farmers in Uganda

Website URL
<https://basis.ucdavis.edu/project/building-market-linkages-smallholder-farmers-uganda>

Title	Type of Output	Date	URL
Professor Craig McIntosh, School of Global Policy and Strategy at UC San Diego	Presentations	Tuesday, November 15, 2016	https://www.youtube.com/watch?v=KPhyxu5DwQ
Building Market Linkages for Smallholder Farmers in Uganda	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk4466/files/2017-03/AMA%20Thumbnail-McIntosh%20Uganda.pdf
Building Market Linkages for Smallholder Farmers in Uganda (proposal)	Briefs/Policy Documents	Monday, September 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk4466/files/2017-01/BASIS-AMA-McIntosh-Final-Revision.pdf
Using Innovative Mobile Technology to Bridge Market Gaps	Briefs/Policy Documents	Sunday, January 1, 2017	http://basis.ucdavis.edu/sites/g/files/dgvnsk4466/files/2017-01/McIntosh-Kuduh-Platform-1.pdf
Building Market Linkages for Smallholder Farmers in Uganda (Presentation)	Presentations	Friday, October 24, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk4466/files/2017-03/McIntosh-Craig-New-Project-Presentation.pdf
An All Baba for Farmers: Linking Buyers & Sellers in Ugandan Agricultural Markets	Presentations	Saturday, May 21, 2016	http://cega.berkeley.edu/assets/cega_events/116/An_Alibaba_for_farmers_-_Craig_McIntosh.pdf
Building Market Linkages for Smallholder Farmers in Uganda	External Media Coverage	Wednesday, January 1, 2014	https://www.poverty-action.org/study/building-market-linkages-smallholder-farmers-uganda
2014 BASIS AMA CRSP/4 Index Insurance Innovation Initiative Technical Committee Meeting	Stakeholder Meetings	Thursday, November 6, 2014	https://basis.ucdavis.edu/past-event/basis-ama-crsp4-index-insurance-innovation-initiative-2014-technical-committee-meeting
Barriers to Market Access for Smallholder Farmers	External Media Coverage	Thursday, July 23, 2015	http://www.theigc.org/project/barriers-to-market-access-for-smallholder-farmers/
2015 Quarter 1 Report	Stakeholder Meetings	Tuesday, March 31, 2015	dropbox files
Got (Price) Risk?	External Media Coverage	Friday, August 11, 2017	https://agrilinks.org/post/got-price-risk
Virtual Systems Makes the Connection Between Agriculture Buyers and Sellers	External Media Coverage	Thursday, June 30, 2016	https://www.feedthefuture.gov/article/virtual-system-makes-connection-between-agriculture-buyers-and-sellers
Of Maize and Money: How to Bring Farmers into the Financial System	External Media Coverage	Thursday, January 7, 2016	http://www.worldbank.org/en/news/feature/2016/01/07/of-maize-and-money-how-to-bring-all-farmers-into-the-financial-system
Professor Abdoul Sam, OSU, speaks on Coupled Credit and Insurance Contracts in Ghana	External Media Coverage	Wednesday, December 14, 2016	https://www.youtube.com/watch?v=EPxMSLp9LDs

Principal Investigator, Project Location
Project Title
Website URL

Miranda (Ohio State) - Ghana
 Promoting Adoption of Improved Production Technologies via Coupled Credit and Insurance Contracts among Smallholders in Ghana
<https://basis.ucdavis.edu/project/promoting-adoption-improved-production-technologies-coupled-credit-and-insurance-contracts>

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Title	Type of Output	Date	URL
Promoting Adoption of Improved Production Technologies Among Smallholders in Ghana Via Coupled Credit and Insurance Contracts	Briefs/Policy Documents	Wednesday, May 11, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-03/AMA%20Thumbnail-Miranda%20Ghana.pdf
Using Index Insurance to Enhance the Agricultural Credit System in Ghana	Briefs/Policy Documents	Saturday, May 7, 2016	http://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-02/Miranda-brief-2014-05.pdf
Insured Loans Improve Credit Access and Technology Adoption of Ghanaian Farmers	Working Papers	Tuesday, December 6, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-02/Mishra_job%20Mkt%20Paper_20161206.pdf
Promoting Adoption of Improved Production Technologies Among Smallholders in Ghana Via Coupled Credit and Insurance Contracts (Proposal)	Briefs/Policy Documents	Wednesday, May 15, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-02/Miranda_Proposal.pdf
Insured Loans Increase Credit Access and Farming Technology Adoption in Ghana	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-03/AMA%20Brief%20-%20Miranda%20index%20insure%20-%202017-03_0.pdf
Promoting Adoption of Improved Production Technologies among Smallholders in Ghana via Coupled Credit and Index Insurance Contracts	Presentations	Thursday, November 6, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-03/Miranda-Mario-Project-Update.pdf
A Heterogeneous Agent Model of Credit-Linked Index Insurance and Farm Technology Adoption	External Media Coverage	Tuesday, April 21, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-01/miranda2015.pdf
Willingness to Pay for Insured Loans in Northern Ghana	Working Papers	Sunday, July 26, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-02/Willingness-to-Pay-for-Insured-Loans-in-Northern-Ghana-AFA-Draft.pdf
OSU-ACET Index Insurance Program	External Media Coverage	Thursday, January 1, 2015	http://jpa.osu.edu/worldwide-projects/africa/osu-acet-index-insurance-program
Climate Change and Multi-Dimensional Sustainability in African Agriculture	Presentations	Tuesday, June 2, 2015	http://pdf.usaid.gov/pdf_docs/PAA00KPSZ.pdf
Promoting Adoption of Improved Production Technologies among Smallholders in Ghana via Coupled Credit and Index Insurance Contracts	Presentations	Monday, November 6, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-04/Miranda.pdf
Discussion of Miranda Ghana Project: Coupling Insurance and Credit	Presentations	Friday, September 13, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnslk466/files/2017-03/Discussion%20of%20Miranda%20Ghana%20Project.pdf
Khushbha Mishra, Ohio State University, summarizes a recent project in Ghana	External Media Coverage	Tuesday, August 15, 2017	https://www.youtube.com/watch?v=gmkaii16A_A&feature=youtu.be
Professor Abdoul Sam, OSU, speaks on coupled credit and insurance contracts in Ghana	External Media Coverage	Wednesday, December 14, 2016	https://www.youtube.com/watch?v=EPXMSLP9LDs&feature=youtu.be
Discussions and Conclusions	Misc. Outputs	Tuesday, June 2, 2015	http://agrinfacility.org/sites/agrinfacility.org/files/Sheela3887004_Main_session_description_LRU_ALE_MVA_FAO_KLO_LRU_LFA_27052014_V2.pdf
Can Index Insurance Improve Credit Access Among Smallholder Farmers in Ghana? Does it Differ Over Male and Female Farmers?	Working Papers	Sunday, July 31, 2016	http://ages.consearch.umn.edu/bitstream/239853/2/AAEA2016_Mishra%20e%20a.pdf
2014 BASIS AMA CRSP/4 Index Insurance Innovation Initiative Technical Committee Meeting	Stakeholder Meetings	Thursday, November 6, 2014	https://basis.ucdavis.edu/past-event/basis-ama-crsp/4-index-insurance-innovation-initiative-2014-technical-committee-meeting
2014 Quarter 1 Report	Stakeholder Meetings	Sunday, March 30, 2014	dropbox files
2014 Quarter 2 Report	Stakeholder Meetings	Monday, June 30, 2014	dropbox files
2015 Quarter 2 Report	Stakeholder Meetings	Tuesday, June 30, 2015	dropbox files
2015 Quarter 4 Report	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files
2016 Quarter 1 Report	Stakeholder Meetings	Thursday, March 31, 2016	dropbox files
Insured Loans Improve Credit Access and Technology Adoption of Ghanaian Farmers	Working Papers	Tuesday, December 6, 2016	http://feedthefuture.ucdavis.edu/sites/ucsfactory.com/sites/g/files/dgvnslk466/files/2017-02/Mishra_job%20Mkt%20Paper_20161206.pdf

Principal Investigator, Project Location Mobarak (Y'ale) - India
Project Title Selling Formal Insurance to the Informally Insured in India
Website URL <https://basis.ucdavis.edu/project/selling-formal-insurance-informally-insured-india>

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Title	Type of Output	Date	URL
The Interactions Between Formal Insurance Markets and Informal Risk Sharing in India	Briefs/Policy Documents	Wednesday, January 1, 2014	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Mobarak_SellingInsurance_India.pdf
Selling Formal Insurance to the Informally Insured in India	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Mobarak%20India.pdf
The Effects of Rainfall Insurance on the Agricultural Labor Market	Presentations	Saturday, April 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-04/Mobarak%20BASIS%20presentation.pdf
Paper: Risk, Insurance and Wages in General Equilibrium	Working Papers	Sunday, December 1, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-04/gen-egm-paper-v6.pdf
Selling Formal Insurance to the Informally Insured (Proposal)	Briefs/Policy Documents	Saturday, September 1, 2012	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Abridged-proposal-Mobarak-Rosenzweig_Revised-copy.pdf
Informal Risk Sharing, Index Insurance, and Risk Taking in Developing Countries	Published Academic Papers	Wednesday, May 1, 2013	http://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.103.3.375
Risk, Insurance and Wages in General Equilibrium	Working Papers	Wednesday, January 1, 2014	http://www.nber.org/papers/w19811.pdf
Risk, Insurance and Wages in General Equilibrium	Misc. Outputs	Sunday, June 1, 2014	http://faculty.som.yale.edu/mushfiq/mobarak/papers/genegm.pdf
Informal Risk Sharing, Index Insurance, and Risk Taking in Developing Countries	Misc. Outputs	Wednesday, May 1, 2013	https://www.povertyactionlab.org/sites/default/files/publications/300_400%20rainfall%20insurance%20AER%202013.pdf
Risk, Insurance and Wages in General Equilibrium	Misc. Outputs	Sunday, June 1, 2014	https://ideas.repec.org/p/egcc/wp/paper/1035.html
2014 Quarter 1 Report	Stakeholder Meetings	Monday, March 31, 2014	dropbox files
2014 Quarter 2 Report	Stakeholder Meetings	Monday, June 30, 2014	dropbox files
2015 Quarter 2 Report	Stakeholder Meetings	Tuesday, June 30, 2015	dropbox files

Principal Investigator, Project Location Mude (ILRI) - Ethiopia, Kenya
Project Title Index-Based Livestock Insurance in East Africa
Website URL <https://basis.ucdavis.edu/project/index-based-livestock-insurance-east-africa>

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Title	Type of Output	Date	URL
Index-Based Livestock Insurance IBLI (website)	External Media Coverage	Wednesday, December 14, 2016	https://ibli.ilri.org/
Willingness to Pay for Index Based Livestock Insurance: Results From A Field Experiment in Northern Kenya	Working Papers	Tuesday, September 1, 2009	https://arxiv.org/bitstream/handle/10548/784f/1/chattarat_et_al_willingness.pdf;sequence=2
Dynamic Effects of Index Based Livestock Insurance on Household Intertemporal Behavior and Welfare	Working Papers	Sunday, January 23, 2011	https://arxiv.org/abs/1010.1493
A Safety Net for Pastoral Communities during Drought	External Media Coverage	Monday, April 10, 2017	https://us9.campaign-archive2.com/?u=99c8501fe81bd493ac1d96c808&id=7798818&e=5a438b8c6d6
Targeted Social Protection in a Pastoralist Economy: Case from Kenya	Briefs/Policy Documents	Monday, May 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-05/targetedsocialprotectioninpastoralisteconomy.pdf
UC Davis launches \$1.4M project to help Kenya's rural poor	External Media Coverage	Monday, February 27, 2017	https://www.universityofcalifornia.edu/news/uc-davis-launches-14m-project-help-kenyas-rural-poor
After the Drought: The Impact of Microinsurance on Consumption Smoothing and Asset Protection.	Working Papers	Tuesday, January 1, 2013	http://www.nber.org/papers/w19702.pdf
Insurance Protects Herds and Secures Community Health	External Media Coverage	Thursday, February 23, 2017	https://www.ucdavis.edu/one-health/safety-net-pastoral-drought
Government of Kenya Partners with Insurers to Make Record Insurance Payouts for Livestock Herders Facing Historic Drought	Briefs/Policy Documents	Monday, February 20, 2017	https://basis.ucdavis.edu/news/government-kenya-partners-insurers-make-record-insurance-payouts-livestock-herders-facing-drought
Index-Based Livestock Insurance Program in Ethiopia: Building on Lessons Learned	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Update-IBLI-Ethiopia_revised.pdf
Index Based Livestock Insurance for Pastoralists in Ethiopia	Briefs/Policy Documents	Friday, February 1, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Mude%20Ethiopia.pdf
The IBLI Color Legend: Translating Index Based Mortality Predictions Into Meaningful Signals	Briefs/Policy Documents	Friday, July 1, 2011	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Color-Legend-v4.pdf
Coping with Drought: Assessing the Impacts of Livestock Insurance in Kenya	Briefs/Policy Documents	Thursday, March 1, 2012	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Carter_Coping-With-Drought.pdf

Coping with Drought: Assessing the Impacts of Livestock Insurance in Kenya	Briefs/Policy Documents	Thursday, March 1, 2012	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Carrer_Coping_With-Drought.pdf
Index Based Livestock Insurance for Livestock Herders in Northern Kenya	Briefs/Policy Documents	Friday, February 1, 2013	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/14-Update-IBL-Kenya_revised.pdf
Gender and the Success of Risk Management Products for Pastoralists in East Africa	Briefs/Policy Documents	Thursday, July 2, 2015	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/Gender-Matters2.pdf
The Favorable Impacts of Index-Based Livestock Insurance: Evaluation Results from Ethiopia and Kenya	Briefs/Policy Documents	Sunday, July 5, 2015	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-02/BASIS-BRIEF1.pdf
Index-based Livestock Insurance: From Asset Replacement to Asset Protection in East Africa	Briefs/Policy Documents	Sunday, January 1, 2017	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/1/Module-Asset-Protection-Change.pdf
Before and After the Drought: Evidence on the Impact of Index Insurance on Small Farm Investment and Social Protection	External Media Coverage	Saturday, April 1, 2017	http://us9.campaign-archive2.com/?u=99c8501fe81bd493ac1d96c808&id=7798818deb&e=5ad38b9cde
Hunger Safety Net Program (HSNP) and Index-Based Livestock Insurance (IBLI) Baseline Comparison	Briefs/Policy Documents	Sunday, January 1, 2017	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/1/BeforeAfter-TheDrought-1-1-2017.pdf
How Basis Risk and Spatiotemporal Adverse Selection Influence Demand for Index Insurance: Evidence from Northern Kenya	Published Academic Papers	Saturday, November 1, 2014	http://barrett.dyson.cornell.edu/research/datasets/HSNP_IBLI_Comparison.pdf
Environmental Spillovers of Index-Based Livestock Insurance	Working Papers	Monday, December 1, 2014	http://barrett.dyson.cornell.edu/files/papers/jensenMudeBarrettDemandDec2014.pdf
Social Protection in the Face of Climate Change: Targeting Principles and Financing Mechanisms	Published Academic Papers	Friday, August 1, 2014	http://agesearch.umn.edu/bitstream/172441/2/2014June%2011%20ProductiveSpilloversIBLI.pdf
Asset Insurance Markets and Chronic Poverty	Working Papers	Sunday, November 1, 2015	http://barrett.dyson.cornell.edu/files/papers/Characterization_v9_combined.compressed.pdf
Index Insurance and Cash Transfers: A Comparative Analysis from Northern Kenya	Working Papers	Thursday, January 1, 2015	http://documents.worldbank.org/curated/en/610051468000928462/pdf/WPS7476.pdf
Welfare Impacts of Index Insurance in the Presence of a Poverty Trap	Working Papers	Wednesday, December 30, 2015	http://www.montana.edu/sjanzent/valuinsasetinsurancev11.pdf
Estimating Development Resilience: A Conditional Moments-Based Approach	Published Academic Papers	Monday, June 1, 2015	https://drive.google.com/file/d/0Bxuu0YRdPE0eDdCYXQzXNwWYXc/view
Can Insurance Help Manage Climate Risk and Food Insecurity? Evidence from the Pastoral Regions of East Africa	Working Papers	Monday, February 1, 2016	http://barrett.dyson.cornell.edu/files/papers/Chantarat%20et%20al%20Feb%202016.pdf
Poverty Traps and the Social Protection Paradox	Working Papers	Wednesday, June 1, 2016	http://www.aifdb.org/fileadmin/uploads/aifdb/Documents/Publications/WPFS_No_236_Estimating_Development_Resilience_A_Conditional_Moments-Based_Approach.pdf
Insuring Against Drought-Related Livestock Mortality: Piloting Index-Based Livestock Insurance in Northern Kenya	Working Papers	Tuesday, March 1, 2016	http://www.montana.edu/sjanzent/caninsurancehelpmanagelimateclimatefoodinsecurity.pdf
Pro-Poor Risk Management: Essays on the Economics of Index Based Risk Transfer Products	Misc. Outputs	Tuesday, June 28, 2016	http://conference.nber.org/confer/2016/PTs16/PTs16prz.html
Insuring Against a Poverty Trap	Briefs/Policy Documents	Saturday, January 1, 2011	https://cgspace.cgiar.org/bitstream/handle/10568/16493/AGRA-ILRI-13-IBLI.pdf;sequence=1
Gender Differences in Demand for Index-Based Livestock Insurance	Published Academic Papers	Saturday, August 1, 2009	https://cgspace.cgiar.org/bitstream/handle/10568/893/IBLI_ThesisChantarat.pdf;sequence=1
Basis Risk, Uptakes and Impacts of Index Based Livestock Insurance in Northern Kenya	Briefs/Policy Documents	Tuesday, January 1, 2013	http://gradworks.umi.com/35796/35796898.html
Incomes and Asset Poverty Dynamics and Child Health among Pastoralists in Northern Kenya	Working Papers	Wednesday, April 1, 2015	http://barrett.dyson.cornell.edu/files/papers/150424_BageantBarrett_Gender.pdf
Insuring the Never Before Insured: Explaining Index Insurance Through Financial Education Games	External Media Coverage	Monday, August 18, 2014	https://commons.cornell.edu/handle/1813/38890
Altering Poverty Dynamics with Index Insurance: Northern Kenya's HSNP	Published Academic Papers	Thursday, September 1, 2016	https://livestockinsurance.files.wordpress.com/2016/10/phd-thesis_samuel-mburu.pdf
Intelligent Design of Index Insurance for Smallholder Farmers and Pastoralists	Briefs/Policy Documents	Friday, August 1, 2008	https://cgspace.cgiar.org/bitstream/handle/10568/765/IBLI_InsuringNever.pdf;sequence=1
Project Summary: Index Based Livestock Insurance For Northern Kenya's Arid and Semi-Arid Lands: The Marsabit Pilot	Briefs/Policy Documents	Saturday, November 1, 2008	https://cgspace.cgiar.org/bitstream/handle/10568/782/IBLI_AlteringPoverty.pdf;sequence=1
Developing Index Based Livestock Insurance for Managing Livestock Asset Risks in Northern Kenya	Briefs/Policy Documents	Tuesday, December 1, 2009	https://cgspace.cgiar.org/bitstream/handle/10568/894/IBLI_IntelligentDesign.pdf;sequence=1
The IBLI Color Legend: Translating Index Based Mortality Predictions Into Meaningful Signals	Briefs/Policy Documents	Friday, January 1, 2010	https://cgspace.cgiar.org/bitstream/handle/10568/494/IBLI_PROJECT_SUMMARY_0110.pdf;sequence=1
Coping with Drought: Assessing the Impacts of Livestock Insurance in Kenya	Briefs/Policy Documents	Monday, March 1, 2010	https://cgspace.cgiar.org/bitstream/handle/10568/3305/chantarat_leapDevelopingIBLI.pdf;sequence=1
	Briefs/Policy Documents	Friday, July 1, 2011	https://cgspace.cgiar.org/bitstream/handle/10568/10292/ibli_ColorLegend.pdf;sequence=1
	Briefs/Policy Documents	Thursday, March 1, 2012	https://cgspace.cgiar.org/bitstream/handle/10568/16827/coping-with-drought-14-brief.pdf;sequence=4

Using satellite data to insure camels, cows, sheep and goats: IBLI and the development of the world's first insurance for African pastoralists	External Media Coverage	Thursday, October 1, 2015	https://cgspaces.cgiar.org/handle/10568/51647
East African Herders Insure Against Drought: An Impact Narrative from Kenya and Ethiopia	Briefs/Policy Documents	Monday, September 1, 2014	https://cgspaces.cgiar.org/bitstream/handle/10568/43765/Research_brief_23.pdf?sequence=4
Index-Based Livestock Insurance (IBLI) Lessons in Extension and Outreach: The Case of Wajir County	Briefs/Policy Documents	Sunday, February 1, 2015	https://cgspaces.cgiar.org/bitstream/handle/10568/56823/ResearchBrief_39.pdf?sequence=4
The favorable impacts of Index-Based Livestock Insurance: Evaluation results from Ethiopia and Kenya	Briefs/Policy Documents	Friday, May 1, 2015	https://cgspaces.cgiar.org/bitstream/handle/10568/66652/ResearchBrief52.pdf?sequence=1
Index-based insurance: Lottery ticket or insurance?	Briefs/Policy Documents	Wednesday, July 1, 2015	https://cgspaces.cgiar.org/bitstream/handle/10568/67727/ResearchBrief53.pdf?sequence=1
Mobile technology-driven capacity development: Lessons from the mNUTRITION and IBLI projects	Briefs/Policy Documents	Tuesday, December 1, 2015	https://cgspaces.cgiar.org/bitstream/handle/10568/69204/capdev_brief3_web.pdf?sequence=5&isAllowedBy
Capacity development in the Index-Based Livestock Insurance project	Briefs/Policy Documents	Tuesday, December 1, 2015	https://cgspaces.cgiar.org/bitstream/handle/10568/69208/capdev_brief6_web.pdf?sequence=5&isAllowedBy
Gamification and mLearning in the Index-Based Livestock Insurance project	Briefs/Policy Documents	Tuesday, December 1, 2015	https://cgspaces.cgiar.org/bitstream/handle/10568/69203/capdev_brief4_web.pdf?sequence=5&isAllowedBy
Integrating index-based livestock insurance with community savings and loan groups in northern Kenya	Briefs/Policy Documents	Tuesday, December 1, 2015	https://livestockinsurance.files.wordpress.com/2010/12/researchbrief_60.pdf
Explaining Index Based Livestock Insurance to Pastoralists	Published Academic Papers	Friday, January 1, 2010	https://cgspaces.cgiar.org/bitstream/handle/10568/778/IBLI_ExplainingIndex.pdf?sequence=1
Dynamics of Field Experiments in Developing Economies: Risk Valuation in Morocco, Kenya and Peru	Published Academic Papers	Thursday, April 1, 2010	https://cgspaces.cgiar.org/handle/10568/3304
Designing Index-Based Livestock Insurance for Managing Asset Risk in Northern Kenya	Published Academic Papers	Wednesday, February 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnks466/files/2017-02/Chanarat_et_al-2013-Journal_of_Risk_and_Insurance-1.pdf
Designing Index-Based Livestock Insurance for Managing Asset Risk in Northern Kenya	Published Academic Papers	Friday, March 1, 2013	https://cgspaces.cgiar.org/handle/10568/17235
Historical extension of operational NDVI products for Livestock Insurance in Kenya	Published Academic Papers	Thursday, May 1, 2014	https://cgspaces.cgiar.org/handle/10568/34415
The Potential and Uptake of Remote Sensing in Insurance: A Review	External Media Coverage	Wednesday, June 11, 2014	http://www.mdpi.com/2072-4292/6/11/10888
A field study for assessing risk-contingent credit for Kenyan pastoralists and dairy farmers	Published Academic Papers	Thursday, January 1, 2015	http://www.emeraldinsight.com/doi/full/10.1108/AFR-07-2015-0030
A Spatial Econometric Approach to Designing and Rating Scalable Index Insurance in the Presence of Missing Data	Published Academic Papers	Wednesday, January 20, 2016	http://link.springer.com/article/10.1057%2Fegpp.2015.31
Experimental Evidence on the Drivers of Index-Based Livestock Insurance Demand in Southern Ethiopia	External Media Coverage	Monday, February 1, 2016	http://www.sciencedirect.com/science/article/pii/S0305750X15002612
Are There Gender Differences in Demand for Index-Based Livestock Insurance?	Published Academic Papers	Friday, May 13, 2016	http://www.randfonline.com/doi/full/10.1080/00220388.2016.1214712
Income and Asset Poverty among Pastoralists in Northern Kenya	Published Academic Papers	Tuesday, June 21, 2016	http://www.randfonline.com/doi/full/10.1080/00220388.2016.1219346
Index Insurance Quality and Basis Risk: Evidence from Northern Kenya	Published Academic Papers	Friday, July 1, 2016	http://ajae.oxfordjournals.org/content/98/5/1450
Effects of drought on child health in Marsabit District, Northern Kenya	Published Academic Papers	Monday, October 10, 2016	http://www.sciencedirect.com/science/article/pii/S1570677X16301794
Food Security as Resilience: Reconciling definition and measurement	Working Papers	Friday, January 1, 2016	http://barrett.dyson.com/ell/files/papers/Food%20Security%20Measurement%20Upton%20Cisse%20Barrett%20an%202016%20RevisionResubmitte%20Clean.pdf
Agricultural Index Insurance for Development	Published Academic Papers	Wednesday, November 9, 2016	http://aepp.oxfordjournals.org/content/early/2016/11/07/aepp.pppw022.abstract
Design and development of IBLI for southern Ethiopia	Presentations	Friday, December 10, 2010	http://www.slideshare.net/ILRI/Inude-ibli-4-ifpri-workshop-dec-2010
Framing the discussion: Developing IBLI Ethiopia research agenda	Presentations	Thursday, March 10, 2011	http://www.slideshare.net/ILRI/framing-the-discussion-developing-ibli-ethiopia-research-agenda
Adapting Index-based Livestock Insurance (IBLI) for Ethiopia: Logic and design	Presentations	Thursday, March 10, 2011	http://www.slideshare.net/ILRI/adaptive-ibli-ethiopia
Implementing IBLI in Northern Kenya and investigating feasibility in Southern Ethiopia	Presentations	Thursday, March 10, 2011	http://www.slideshare.net/ILRI/implementing-ibli-in-northern-kenya-and-investigating-feasibility-in-southern-ethiopia
Weather insurance in practice, Ethiopia	Presentations	Thursday, March 10, 2011	http://www.slideshare.net/ILRI/weather-insurance-in-practice-ethiopia
Index Based Insurance: BASIX experience	Presentations	Friday, March 11, 2011	http://www.slideshare.net/ILRI/Index-based-insurance-basix-experience
CARE Ethiopia Pastoral Livelihoods Programs in Oromia Region	Presentations	Friday, March 11, 2016	http://www.slideshare.net/ILRI/care-ethiopia-pastoral-livelihoods-programs-in-oromia-region

Index Based Livestock Insurance Oromiya insurance company's related products	Presentations	Friday, March 11, 2011	http://www.slideshare.net/ILRI/protecting-pastoralists-against-mortality-losses-due-to-severe-forage-scarcity
Protecting pastoralists against mortality losses due to severe forage scarcity	Presentations	Tuesday, March 29, 2011	http://www.slideshare.net/ILRI/indexed-based-livestock-insurance-ibli-opadc-activities-and-projects-relevant-to-and-complementing-ibli-7443525
Indexed Based Livestock Insurance (IBLI): OPaDC activities and projects relevant to and complementing IBLI	Presentations	Wednesday, March 30, 2011	http://www.slideshare.net/ILRI/protecting-pastoralists-from-the-risk-of-drought-related-livestock-mortality-implementing-index-based-livestock-insurance-in-northern-kenya
Protecting Pastoralists from the Risk of Drought Related Livestock Mortality: Implementing Index Based Livestock Insurance in Northern Kenya	Presentations	Wednesday, May 25, 2011	http://www.slideshare.net/ILRI/options-for-enhancing-resilience-in-pastoral-systems
Options for enhancing resilience in pastoral systems	Presentations	Monday, February 20, 2012	http://www.slideshare.net/ILRI/index-based-livestock-insurance-in-northern-kenya-an-analysis-of-the-patterns-and-determinants-of-purchase
Index-Based Livestock Insurance: Protecting pastoralists against drought-related livestock mortality	Presentations	Wednesday, June 20, 2012	http://www.slideshare.net/ILRI/protecting-pastoralists-against-drought-related-livestock-mortality
Delivering Index-Based Livestock Insurance through ICT	Presentations	Monday, October 22, 2012	http://www.slideshare.net/ILRI/protecting-pastoralists-against-drought-related-livestock-mortality
Index-Based Livestock Insurance (IBLI): Preliminary findings on the positive impacts of an imperfect product	Presentations	Sunday, November 17, 2013	http://www.slideshare.net/ILRI/ict4ag-ibli
Identifying potential methods of up-scaling Index Based Livestock Insurance (IBLI): Lessons in extension and outreach	Presentations	Tuesday, August 5, 2014	http://www.slideshare.net/ILRI/barrett-ibli-june2014
Sustainable livestock insurance for pastoralists	Presentations	Tuesday, September 16, 2014	http://www.slideshare.net/ILRI/tropentag-poster-chelanga
The story of Index Based Livestock Insurance (IBLI)	Presentations	Thursday, February 12, 2015	http://www.slideshare.net/ILRI/ibli-overview-dec2014
Index Based Livestock Insurance: Presenting a challenge	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/the-story-of-index-based-livestock-insurance-ibli
Sustainable livestock insurance for pastoralists: From research to practice and impact	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/index-based-livestock-insurance-presenting-a-challenge
Determinants of migration and environmental spillovers of IBLI	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/mude-research-practiceimpact
The "Elephant in the Room": Issues in pastoralism research - an informal conversation	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/2015-june9-policy-wkshop-rc-pdf
Developing policy innovations for the pastoralist rangelands through cross-sector partnerships	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/animal-fattening-and-fodders
Kenya Livestock Insurance Program: Convergence of public policy, research and private sector innovations	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/ir-ibli-policy-workshop-09062015-tb
The design and implementation of index insurance initiatives: Three challenges for policy	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/presentation-during-iri-workshop-ug
Improving organizational efficiency through information and communication technology	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/2015-june9-policy-wkshop-tooth
Does Insurance Improve Resilience?	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/crowd-sourcing-rangeland-conditions-iri-june-2015
Dynamic Effects of Index Based Livestock Insurance on Household Intertemporal Behavior and Welfare	Presentations	Friday, July 10, 2015	http://www.slideshare.net/ILRI/panel-lyons
Is the demand of the index-based livestock insurance and informal insurance network substitute or complement?	Presentations	Tuesday, July 14, 2015	http://www.slideshare.net/ILRI/iri-panel-lyons
Index insurance and cash transfers: A comparative analysis from Northern Kenya	Presentations	Tuesday, July 14, 2015	http://www.slideshare.net/ILRI/does-insurance-improve-resilience
The subjective wellbeing gains from insurance that does not pay out	Presentations	Tuesday, July 14, 2015	http://www.slideshare.net/ILRI/dynamic-effects-of-index-based-livestock-insurance-on-household-intertemporal-behavior-and-welfare
Social protection in the face of climate change: Targeting principles and financing mechanisms	Presentations	Tuesday, July 14, 2015	http://www.slideshare.net/ILRI/is-the-demand-of-the-index-based-livestock-insurance-and-informal-insurance-network-substitute-or-complement
Pastoralist market engagement in the presence of IBLI: Evidence from Northern Kenya	Presentations	Tuesday, July 14, 2015	http://www.slideshare.net/ILRI/index-insurance-and-cash-transfers-a-comparative-analysis-from-northern-kenya
Early assessment of forage availability for An ASSET Protection Insurance scheme	Presentations	Tuesday, July 14, 2015	http://www.slideshare.net/ILRI/the-subjective-wellbeing-gains-from-insurance-that-does-not-pay-out
Potential of social-ecological modelling to understand dynamics of pastoral land use under processes of change	Presentations	Tuesday, July 14, 2015	http://www.slideshare.net/ILRI/social-protection-in-the-face-of-climate-change-targeting-principles-and-financing-mechanisms
Satellite-based drought monitoring in Kenya in an operational setting	Presentations	Tuesday, July 14, 2015	http://www.slideshare.net/ILRI/pastoralist-market-engagement-in-the-presence-of-ibli

Gamifying mobile learning to improve organizational efficiency in Africa's first insurance for pastoralists: Experience and initial lessons from IBLI's m-learning experiment with young sales agents	Presentations	Tuesday, December 1, 2015	http://www.slideshare.net/ILRI/ibli-gfia-dro-rdec2015
Scaling What Works: Tools for Resilient Drylands	Presentations	Monday, October 17, 2016	http://www.slideshare.net/ILRI/carter-borlaug-2016
Incubating a promising financial solution for the drylands: Toward sustainable index-based livestock insurance (IBLI) for pastoralists	Presentations	Monday, October 17, 2016	http://www.slideshare.net/ILRI/mude-borlaug-2016
Livestock Insurance for Pastoralists in Kenya	External Media Coverage	Friday, February 5, 2010	https://www.youtube.com/watch?v=L-w7htz0nw&index=25&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
Developing the world's first insurance for African pastoralists	External Media Coverage	Thursday, May 5, 2011	https://www.youtube.com/watch?v=CmqfvcvOswU&index=24&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
1st Ever Payout of a Sharia Compliant IBLI in Wajir, Kenya (March 2014)	External Media Coverage	Friday, June 27, 2014	https://www.youtube.com/watch?v=Cusa7TuO2&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX&index=22
ILRI on PKG	External Media Coverage	Monday, December 3, 2012	https://www.youtube.com/watch?v=BFc-HOXlL4&index=21&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
The Origins of IBLI & Preliminary Field Testing	External Media Coverage	Thursday, October 9, 2014	https://www.youtube.com/watch?v=oS-REzvbhrc&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX&index=19
IBLI Education Video	External Media Coverage	Friday, October 10, 2014	https://www.youtube.com/watch?v=___yWZx7_Sfs&index=18&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
Index-Based Livestock Insurance policy workshop: Comments from participants	External Media Coverage	Wednesday, July 8, 2015	https://www.youtube.com/watch?v=TFm-17RXM_A&index=17&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
Brenda Wandera Project Manager with IRLI on Inclusive Education	External Media Coverage	Monday, December 5, 2011	https://www.youtube.com/watch?v=XBlF_imgM4Vg&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX&index=16
Investing in Pastoralism with Andrew Mude	External Media Coverage	Wednesday, August 24, 2011	https://www.youtube.com/watch?v=uEYpSMmC5s&index=15&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
World Food Prize 2012 Dr. Andrew Mude Feed the Future Greenroom Interviews	External Media Coverage	Friday, December 28, 2012	https://www.youtube.com/watch?v=Miu5byuW0&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX&index=14
IBLI - Development of the world's first insurance for African pastoralists	External Media Coverage	Friday, July 10, 2015	https://www.youtube.com/watch?v=ddawaf6ZiA&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX&index=13
IBLI project film: Rural smallholder farmers benefit from insurance	External Media Coverage	Friday, July 10, 2015	https://www.youtube.com/watch?v=4o02ovyl6g&index=12&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
IBLI - opening up new frontiers for pastoralists in northern Kenya	External Media Coverage	Friday, July 10, 2015	https://www.youtube.com/watch?v=0Jk9DYUuY&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX&index=11
Hassan Bashir interview at the Index-Based Livestock Insurance policy workshop	External Media Coverage	Monday, July 13, 2015	https://www.youtube.com/watch?v=lljz28mGBw&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX&index=10
Michael Carter interview at the Index-Based Livestock Insurance policy workshop	External Media Coverage	Tuesday, August 18, 2015	https://www.youtube.com/watch?v=8EHgnv4HTA&index=9&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
Index-Based Livestock Insurance case study: Highlights video	External Media Coverage	Tuesday, October 20, 2015	https://www.youtube.com/watch?v=0x2e8LujAKQ&index=8&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
DirTube News Insurance for Ethiopian Herders aims to combat drought, conflict - TRFN	External Media Coverage	Saturday, December 6, 2014	https://www.youtube.com/watch?v=NzjN1ASyOg&index=7&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
Insurance payouts for Kenyan drought victims	External Media Coverage	Wednesday, October 26, 2011	https://www.youtube.com/watch?v=KOS-us86D6M&index=6&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
Bringing insurance innovation to the pastoral areas of southern Ethiopia	External Media Coverage	Tuesday, January 5, 2016	https://www.youtube.com/watch?v=6xZlTcOpnQ&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX&index=5
Index Based Livestock Insurance in Kenya e-learning course introduction	External Media Coverage	Thursday, June 9, 2016	https://www.youtube.com/watch?v=qmYV2KTYC&index=4&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
Index Based Livestock Takaful e-learning course introduction	External Media Coverage	Wednesday, June 8, 2016	https://www.youtube.com/watch?v=hmn9Yc1ewHA&index=3&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX
Delivering insurance to protect livestock wealth and livelihoods in the drylands of Kenya	External Media Coverage	Sunday, December 4, 2016	https://www.youtube.com/watch?v=VZ4qZCN7sA&list=PLCLZXldq9v2RBjztlur4CqRPdVcaGBX&index=2
International Livestock Research Institute (Blog)	Misc. Outputs	Wednesday, December 14, 2016	https://www.ilri.org/
Innovations in index insurance to Promote Agricultural and Livestock Development in Ethiopia	Stakeholder Meetings	Thursday, December 3, 2015	https://basis.ucdavis.edu/past-event/innovations-in-index-insurance-to-promote-agricultural-and-livestock-development-ethiopia
2015 Quarter 4 Report	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files
2016 Quarter 1 Report	Stakeholder Meetings	Thursday, March 31, 2016	dropbox files
2016 Quarter 2 Report	Stakeholder Meetings	Thursday, June 30, 2016	dropbox files
Up in the Sky, Help to Keep Africans From Starving	External Media Coverage	Tuesday, November 8, 2016	https://www.nytimes.com/2016/11/08/opinion/up-in-the-sky-help-to-keep-africans-from-starving.html?ref=opinion&_r=0
Kenyan accepts 2016 Norman Borlaug Award for Field Research and Application at World Food Prize Event in Iowa	External Media Coverage	Saturday, October 1, 2016	https://news.ilri.org/2016/10/12/kenyan-accepts-2016-norman-borlaug-award-for-field-research-and-application-at-world-food-prize-event-in-iowa/

Principal Investigator, Project Location
Project Title
Website URL

Palm (Columbia) - Tanzania
 Evaluating the Effect of Site-Specific Soil Information on Farmer Input Choices and the Relationship Between Poverty and Soil Quality in Tanzania
<https://basis.ucdavis.edu/project/evaluating-effects-site-specific-soil-information-farmer-input-choices-and-relationship>

Title	Type of Output	Date	URL	# of Outputs
Evaluating the effect of site-specific soil information on farmer input choices and the relationship between poverty and soil quality (proposal)	Briefs/Policy Documents	Wednesday, January 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Palm_Revvised-BASIS-Proposal-For-Submission-Feb-28.pdf	17
Soil Doc Demo	External Media Coverage	Monday, February 2, 2015	https://www.youtube.com/watch?v=IQ1ofn7M0c4	
Christopher Magomba from Sokoine University summarizes research on soils information in Tanzania	External Media Coverage	Wednesday, June 28, 2017	https://www.youtube.com/watch?v=pmb8sXhm09c&feature=youtu.be	
Thumbnail: Evaluating the Effect of Site-Specific Soil Information on Farmer Input Choices and the Relationship Between Poverty and Soil Quality in Tanzania	Briefs/Policy Documents	Monday, October 24, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnal-Palm%20Tanzania.pdf	
Soil Variation and Why It Matters, Chat Transcript	External Media Coverage	Thursday, June 29, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-08/soils_presentation_chat_transcript.pdf	
Soil Variation and Why It Matters, Presentation Transcript	External Media Coverage	Thursday, June 29, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-08/soils_presentation_audio_transcript_0.pdf	
Soil Variation and Why It Matters, Additional Q & A	External Media Coverage	Thursday, June 29, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-08/soils_variation_webinar_unanswered_webinar_questions.pdf	
Soil Variation and Why It Matters, Questions & Answers	External Media Coverage	Thursday, June 29, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-08/soils_qa_audio_transcript_0.pdf	
Vital Signs: Integrating Data to Visualize the Human, Agriculture, and Nature Nexus	External Media Coverage	Friday, February 13, 2015	https://aaas.confex.com/aaas/2015/webprogram/Paper14789.html	
Targeted Soil Recommendations May Improve Smallholder Yields in Tanzania	Briefs/Policy Documents	Thursday, June 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-06/AMA%20Brief%20-%20Palm%20soil%20resting%20-%202017-07.pdf	
Webinar: Soil Variation and Why It Matters	Stakeholder Meetings	Thursday, June 29, 2017	https://basis.ucdavis.edu/events/webinar-soil-variation-and-why-it-matters	
Revitalizing Africa's Soils	External Media Coverage	Wednesday, September 24, 2014	http://blogs.ei.columbia.edu/2014/09/24/revitalizing-africas-soils/	
Effects of Fertilizer on inorganic soil N in East Africa Maize systems: Vertical Distributions and Temporal Dynamics	Published Academic Papers	Friday, September 2, 2016	http://onlinelibrary.wiley.com/doi/10.1890/15-1518.1/full	
Effects of Fertilizer on inorganic soil N in East Africa Maize systems: Vertical Distributions and Temporal Dynamics	Published Academic Papers	Friday, September 2, 2016	http://darchive.mhwholibrary.org/bitstream/handle/1912/8488/Tully_et_al_2016-Ecological_Applications.pdf?sequence=1	
Soil Analysis	Misc. Outputs	Sunday, May 4, 2014	https://archive.org/stream/SoilAnalysis/Replenishing_soil_fertility_in_africa_djvu.txt	
2014 Quarter 4 Report	Stakeholder Meetings	Wednesday, December 31, 2014	dropbox files	
2015 Quarter 1 Report	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files	

Principal Investigator, Project Location
Project Title
Website URL

Sadoulet (UC Berkeley) - Bangladesh
 Building Resilience and Assets for Food Security in Bangladesh
<https://basis.ucdavis.edu/project/building-resilience-and-assets-food-security-bangladesh>

Title	Type of Output	Date	URL	# of Outputs
Building Resilience and Assets for Food Security in Bangladesh (Proposal)	Briefs/Policy Documents	Wednesday, May 21, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Abridged-Proposal.pdf	8
Emergency Loans: Building on Microfinance Success to Enhance Resilience	Briefs/Policy Documents	Monday, June 27, 2016	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Sadoulet-Emergency-Loans.pdf	
Combining Technological and Institutional Innovations for Risk Management and Risk Coping by Smallholder Farmers in Bangladesh	Briefs/Policy Documents	Tuesday, May 12, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Sadoulet%20Bangladesh.pdf	
Customized Microfinance Products and Potential for Risk Coping and Management	Presentations	Wednesday, June 25, 2014	http://www.afd.fr/webdav/site/afd/shared/PORTAILS/EVENEMENTS/Session2-1-de-janvry-flix-fin-prod.pdf	
2014 Quarter 4 Report	Stakeholder Meetings	Wednesday, December 31, 2014	dropbox files	
2015 Quarter 1 Report	Stakeholder Meetings	Tuesday, March 31, 2015	dropbox files	
2016 Quarter 2 Report	Stakeholder Meetings	Thursday, March 31, 2016	dropbox files	
2016 Quarter 3 Report	Stakeholder Meetings	Thursday, June 30, 2016	dropbox files	

Principal Investigator, Project Location
 Shoven (Stanford) - Kenya
Project Title
 Tailoring Contract Farming to Smallholders: Experimental Evidence on Enrollment Impact, Insurance Provision, and Communication Technologies in Kenya
Website URL
<https://basis.ucdavis.edu/project/tailoring-contract-farming-smallholders-experimental-evidence-enrollment-impact-insurance>

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Title	Type of Output	Date	URL
Tailoring Contract Farming to Smallholders: Experimental Evidence on Enrollment Impact, Insurance Provision, and Communication Technologies	Briefs/Policy Documents	Wednesday, June 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMIA%20Thumbnail-Casaburi%20Kenya.pdf
Tailoring Contract Farming to Smallholders	Presentations	Friday, September 13, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Casaburi_0.pdf
2013 BASIS/4 Technical Committee Meeting	Stakeholder Meetings	Thursday, September 12, 2013	https://basis.ucdavis.edu/past-event/2013-basis4-technical-committee-meeting
Interlinking Insurance and Product Markets	Presentations	Friday, November 7, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Casaburi-Lorenzo-Project-Update.pdf
Time vs. State in Insurance: Experimental Evidence from Contract Farming in Kenya	Working Papers	Saturday, December 17, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/CasaburiWillis.pdf
Tailoring Sugarcane Contract to Farming Smallholders in Kenya	Briefs/Policy Documents	Tuesday, April 1, 2014	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Casaburi_Brief.pdf
Proposal: Experimental Evidence on Enrollment Impact, Insurance Provision, and Communication Technologies	Briefs/Policy Documents	Sunday, December 1, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Shoven_Proposal.pdf
Harnessing ICT to Increase Agriculture Production: Evidence from Kenya	Working Papers	Thursday, March 27, 2014	http://arefiles.ucdavis.edu/uploads/flipr_public/2014/03/27/casaburi_et_al_ict_agriculture_20140306.pdf
Private Enterprise Development in Low-Income Countries (PEDL) Research Workshop	Misc. Outputs	Thursday, December 12, 2013	http://studylib.net/doc/12315387/private-enterprise-development-in-low-income-countries-p...
Harvard Economic files	Misc. Outputs	Thursday, October 1, 2015	http://economics.harvard.edu/files/economics/files/cv_packet_5.pdf
Management Information Systems and Firm Performance: Experimental Evidence from a Large Agribusiness Company in Kenya	Working Papers	Tuesday, July 1, 2014	http://pedl.cepr.org/sites/default/files/Research%20note%20-%20Management%20Information%20Systems%20and%20Firm%20Performance.pdf
2014 Quarter 4 Report	Stakeholder Meetings	Wednesday, December 31, 2014	dropbox files
2015 Quarter 2 Report	Stakeholder Meetings	Tuesday, June 30, 2015	dropbox files
2016 Quarter 1 Report	Stakeholder Meetings	Thursday, March 31, 2016	dropbox files
2016 Quarter 2 Report	Stakeholder Meetings	Thursday, June 30, 2016	dropbox files

Principal Investigator, Project Location
 Smith (George Washington University) - Senegal and Uganda
Project Title
 Complementarities of Training, Technology, and Credit in Smallholder Agriculture in Senegal and Uganda
Website URL
<https://basis.ucdavis.edu/project/complementarities-training-technology-and-credit-smallholder-agriculture-impact>

of Outputs
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Title	Type of Output	Date	URL
Complementarities of Training, Technology, and Credit in Smallholder Agriculture: Impact Sustainability and Policy for Scaling-up in Senegal	Briefs/Policy Documents	Thursday, September 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMIA%20Thumbnail-Smith%20Senegal.pdf
Training, Technology, and Credit in Senegal & Uganda	Briefs/Policy Documents	Friday, August 1, 2014	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Smith_Stephen2.pdf
How Sustainable are Benefits from Extension for Smallholder Women Farmers? Evidence from a 'Reverse-Randomized Control Trial' in Uganda	Working Papers	Saturday, October 24, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Smithuganda2015.pdf-1.pdf
Complementarities of Training, Technology, and Credit in Smallholder Agriculture: Impact, Sustainability, and Policy for Scaling-up in Senegal and Uganda	Briefs/Policy Documents	Sunday, December 1, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Smith_Proposal.pdf
The Sustainability of Technology Dissemination Programs	Presentations	Thursday, September 12, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Fishman.pdf
2013 BASIS/4 Technical Committee Meeting	Stakeholder Meetings	Thursday, September 12, 2013	https://basis.ucdavis.edu/past-event/2013-basis4-technical-committee-meeting
Impact of Phasing Out an Integrated Agricultural Development Program for Smallholder Farmers	Presentations	Thursday, September 12, 2013	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-04/Smith.pdf
Project Update: Complementarities of Training, Technology, and Credit in Smallholder Agriculture	Presentations	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Smith-Stephen-Project-Update.pdf
Agricultural Extension and Technology Adoption for Food Security: Evidence from Uganda	Working Papers	Friday, April 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/SmithIEPWP201511.pdf

How Sustainable are Benefits from Extension for Smallholder Women Farmers? Evidence from a 'Reverse-Randomized Control Trial' in Uganda	Presentations	Sunday, May 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/presentation_3ie_14jan.pdf
Professor Stephen Smith, GWU, on an evaluation of a drip irrigation project in Senegal	External Media Coverage	Tuesday, December 13, 2016	https://www.youtube.com/watch?v=3m-UABHXHVE
Professor Stephen Smith, GWU, on an evaluation of a BRAC Program in Uganda	External Media Coverage	Tuesday, December 13, 2016	https://www.youtube.com/watch?v=KSHkiZcnlpk
Agricultural Extension and Technology Adoption for Food Security: Evidence from Uganda	Published Academic Papers	Thursday, October 1, 2015	https://www.econstor.eu/handle/10419/114066
Agricultural Extension and Technology Adoption for Food Security: Evidence from Uganda	Published Academic Papers	Friday, September 4, 2015	https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2655155
Complementarities of Training, Technology, and Credit in Smallholder Agriculture: Impact, Sustainability, and Policy for Scaling-up	External Media Coverage	Saturday, June 1, 2013	http://crsps.net/resource/complementarities-of-training-technology-and-credit-in-smallholder-agriculture-impact-sustainability-and-policy-for-scaling-up/
Can temporary subsidies and agricultural extension build sustainable adoption?	External Media Coverage	Wednesday, June 28, 2017	http://blogs.worldbank.org/impactevaluations/can-temporary-subsidies-and-agricultural-extension-build-sustainable-adoption
Collective Action for Drip Irrigation Takes Off in Senegal	External Media Coverage	Tuesday, July 11, 2017	https://agrilinks.org/blog/collective-action-drip-irrigation-takes-senegal
2013 BASIS / I4 Technical Committee Meeting	Stakeholder Meetings	Thursday, September 12, 2013	https://basis.ucdavis.edu/events/2013-basis4-technical-committee-meeting
Complementarities of Training, Technology, and Credit in Smallholder Agriculture: Impact, Sustainability, and Policy for Scaling-up in Senegal and Uganda	External Media Coverage	Saturday, June 1, 2013	https://expert.gwu.edu/display/grant-850496f0a556936e37d257b4e5961724
"How Sustainable Are Benefits from Extension for Smallholder Women Farmers? Evidence from a 'Reverse-Randomized Control Trial' in Uganda"	Working Papers	Sunday, January 24, 2016	http://faculty.virginia.edu/mlipscomb/Molly_Lipscomb/WADES_2016_files/ReverseRCT_abstract.pdf
Munshi Sulaiman speaks on BRAC work in Uganda	External Media Coverage	Tuesday, August 1, 2017	https://www.youtube.com/watch?v=H3R42sg4V08&feature=youtu.be
Inequality and Growth: Patterns and Policy	Misc. Outputs	Friday, January 1, 2016	https://openknowledge.worldbank.org/bitstream/handle/10986/24983/WB-IEA-v1.pdf?sequence=1
Agricultural Extension and Technology Adoption for Food Security: Evidence from Uganda	Published Academic Papers	Wednesday, July 1, 2015	http://ftp.iza.org/dp7206.pdf
Principal Investigator: "Complementarities of Training, Technology, and Credit in Smallholder Agriculture: Impact, Sustainability, and Policy for Scaling-up in Senegal and Uganda, " Funded by Basis (usaid)	Misc. Outputs	Friday, January 1, 2016	https://www.semanticscholar.org/paper/Principal-Investigator-Complementarities-of-Training-Technology-and-Credit-in-Smallholder-Agriculture-Impact-Sustainability-and-Policy-for-Scaling-up-in-Senegal-and-Uganda-Smith/9ce891dd73c4d8df6a0dd367cf687f926f5362cf
2014 Quarter 2 Report	Stakeholder Meetings	Monday, June 30, 2014	dropbox files
2015 Quarter 4 Report	Stakeholder Meetings	Wednesday, December 31, 2014	dropbox files
2016 Quarter 1 Report	Stakeholder Meetings	Thursday, March 31, 2016	dropbox files
2016 Quarter 2 Report	Stakeholder Meetings	Thursday, June 30, 2016	dropbox files

Principal Investigator, Project Location
Project Title
Website URL

Stoppitsky (University of San Francisco) - Tanzania
 Rural Livelihoods and Institutional Reform in Small-Scale Fisheries in Tanzania
<https://basis.ucdavis.edu/project/rural-livelihoods-and-institutional-reform-small-scale-fisheries-tanzania>

Title	Type of Output	Date	URL	# of Outputs
Where Winning Isn't Everything: Playing Games to Learn Cooperation	Briefs/Policy Documents	Wednesday, June 1, 2016	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Stopnitzky-Games.pdf	6
Rural Livelihoods and Institutional Reform in Small-Scale Fisheries in Tanzania	Briefs/Policy Documents	Wednesday, March 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/AMA%20Thumbnail-Stopnitzky%20Tanzania.pdf	
Fishery Enforcement Could Have the Unintended Impact of Stock Collapse	Briefs/Policy Documents	Thursday, June 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-06/AMA%20Brie%20-%20Stopnitzky%20fishery%20management%20-%202017-08.pdf	
Rural Livelihoods and Institutional Reform in Small-Scale Fisheries in Tanzania	Briefs/Policy Documents	Monday, March 3, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Stopnitzky%20Revised%20BASIS%20Proposal%203%202014.pdf	
Small-Scale Fisheries and Institutional Reform in Rural Tanzania	Presentations	Wednesday, October 1, 2014	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/Stopnitzky-Yamiv-New-Project-Presentation.pdf	
2015 Quarter 1 Report	Stakeholder Meetings	Tuesday, March 31, 2015	dropbox files	

Principal Investigator, Project Location
Project Title
Website URL

Yang (University of Michigan) - Mozambique
 Health, Education, and Economic Interventions for Orphans and Vulnerable Children in Mozambique
<https://basis.ucdavis.edu/project/health-education-and-economic-interventions-orphans-and-vulnerable-children-mozambique>

Title	Type of Output	Date	URL	# of Outputs
Health, Education, and Economic Interventions for Orphans and Vulnerable Children in Mozambique	Briefs/Policy Documents	Thursday, September 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Yang-Proposal-Web-Version.pdf	4
Health, Education, and Economic Interventions for Orphans and Vulnerable Children in Mozambique	External Media Coverage	Friday, April 1, 2016	http://www.psci.stu.umich.edu/research/project-detail/37059	
Q&A with Professor Dean Yang	External Media Coverage	Wednesday, November 30, 2016	https://basis.ucdavis.edu/news/qa-professor-dean-yang	
Health, Education, and Economic Interventions for Orphans and Vulnerable Children in Mozambique	Briefs/Policy Documents	Sunday, January 1, 2017	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/AMA%20Thumbnail%20Yang%20Mozambique.pdf	

Principal Investigator, Project Location
Project Title
Website URL

Carter (UC Davis) - Tanzania and Mozambique
 Bundling Innovative Risk Management Technologies to Improve Nutritional Outcomes of Vulnerable Agricultural Households
<https://basis.ucdavis.edu/project/bundling-innovative-risk-management-technologies-improve-nutritional-outcomes-africa>

Title	Type of Output	Date	URL	# of Outputs
Bundling Innovative Risk Management Technologies to Improve Nutritional Outcomes of Vulnerable Agricultural Households	Briefs/Policy Documents	Monday, August 1, 2016	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/Carter-DT-Maize-6-27-16.pdf	8
Achieving Development Impact with Complementary Stress-resistant Seed and Financial Technologies	Briefs/Policy Documents	Sunday, February 1, 2015	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-03/DTM-Proposal%20only%20final.pdf	
Innovations to Improve Index Insurance for Small Scale Agriculturalists	Briefs/Policy Documents	Tuesday, August 1, 2017	https://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-08/AMA%20Success%20Story%20-%20July%202017%20Index%20Contract.pdf	
Paswel Maranya, Socioeconomist at CIMMYT speaks about research underway in Tanzania	External Media Coverage	Monday, August 14, 2017	https://www.youtube.com/watch?v=O-ezHb-xOYs&feature=youtu.be	
AMA Innovation Lab Launches Project Using High-resolution Satellite Data to Improve Accuracy and Quality of an Innovative Risk Management Tool	Briefs/Policy Documents	Tuesday, May 30, 2017	https://basis.ucdavis.edu/news/ama-innovation-lab-launches-project-using-high-resolution-satellite-improve-accuracy-and	
Bundling Innovative Risk Management Technologies to Improve Nutritional Outcomes of Vulnerable Agricultural Households	Briefs/Policy Documents	Thursday, September 1, 2016	http://basis.ucdavis.edu/sites/g/files/dgvnsk466/files/2017-01/DT-Mass-Introduction-Brief-reduced-size.pdf	
2015 Quarter 4 Report (Mozambique)	Stakeholder Meetings	Thursday, December 31, 2015	dropbox files	
2015 Quarter 4 Report (Tanzania)	Stakeholder Meetings	Wednesday, July 22, 2015	dropbox files	

Feed the Future Innovation Lab for Assets and Market Access

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