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.

To “Mind the Gap” means better understanding these roadblocks that stop farmers from adopting new innovations, even when they are locally available, and working to design interventions to close yield gaps, increase productivity, and secure more sustainable livelihoods - ultimately paving the way out of poverty.

This workshop will highlight three categories of farmer-level constraints to the adoption of new technologies that our research has identified, and, through discussion, lay out potential strategies and interventions to reduce the yield gap by overcoming these barriers. Briefly, the categories are:

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.
Exploring The Disparities between Smallholder Farmer Practice and Potential
A workshop presented by the Feed the Future Innovation Lab for Assets and Market Access

This workshop will provide an exciting and dynamic opportunity for participants and attendees to share findings from research and explore the potential for integrating salient ideas from these findings into development programming, particularly in the areas of technological innovation, resilience, scaling, climate smart agriculture, and extreme poverty. It is designed to allow for an in depth discussion of the pressing problem of the “yield gap” and the constraints to technology adoption that cause it.

The participants and audience members are thought leaders, technical experts and program designers interested in improving the efficacy of efforts to scale agricultural technologies to advance food security around the world. Briefs, working papers, video interviews, the creation of new collaborations and partnerships, among other potential outputs, will emerge from the workshop and bring this issue of “MIND THE GAP” to the research and policy-making forefront.

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenters</th>
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<td>8:30am-9:00am</td>
<td>Registration and Continental Breakfast</td>
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| 9:00am-9:30am   | Brief introduction about FEED the FUTURE, USAID, AMA Innovation Lab (BASIS), the workshop, and an explanation of “MIND THE GAP” | 1. Beth Dunford, USAID  
2. Michael Carter, UC Davis |
| 9:30am-10:15am  | The first of the three 30 minute “synthetic” talks on a highlighted workshop topic | 1. Risk and Liquidity - Chris Udry, Yale  
2. Beliefs and Behavior - Andrew Dillon, Michigan State  
3. Profitability - Chris Barrett, Cornell |
| 10:15am-10:30am | Coffee Break                                                          |                                                                            |
| 10:30am-12:00pm | The second and third of the three 30 minute “synthetic” talks         | 1. Risk and Liquidity - Chris Udry, Yale  
2. Beliefs and Behavior - Andrew Dillon, Michigan State  
3. Profitability - Chris Barrett, Cornell |
| 12:00pm to 1:30pm | Lunch break                                                           |                                                                            |
| 1:30pm to 3:30pm | Concurrent Working Sessions: Break into 3 groups based on the highlighted topics.  
- AMA Innovation Lab researchers will act as co-moderators with 1-2 policy and programming experts.  
- Each person will be allotted 20 minutes for presentation.  
- The remaining time should allow ample opportunities for questions and discussion | 1. Risk and Liquidity - Chris Udry, Yale, Lauren Hendricks, Grameen Foundation  
2. Beliefs and Behavior - Andrew Dillon, Michigan State, Emily Hillenbrand & Salome Mhango, Care International  
3. Profitability - Chris Barrett, Cornell, Eric Solomonson, One Acre Fund |
| 3:30pm to 4:00pm | Coffee Break                                                          |                                                                            |
| 4:00pm to 4:45pm | Round Table Wrap-up and Closing Remarks                               | Primary discussants from the working sessions will all come together to present findings on priorities and recommended interventions (5 min per person). |

For more information about this event, please email Sophie Javers: sejavers@ucdavis.edu