

RESEARCH FOR DEVELOPMENT: HOW THREE INNOVATION LABS ARE DRIVING IMPACT

CHAT TRANSCRIPT

JULY 25, 2017

PRESENTERS

Patrick Webb, Tufts University - Feed the Future Innovation Lab for Nutrition

Peter Goldsmith, University of Illinois - Feed the Future Soybean Innovation Lab

Dena Bunnell, Kansas State University - Feed the Future Innovation Lab for Post-Harvest Loss

MODERATOR

Julie MacCartee, USAID Bureau for Food Security

Ahmed Kablan, USAID Bureau for Food Security

Julie MacCartee (USAID/BFS): Good morning, everyone! We are getting set up here in our webinar control room. Please excuse any audio testing.

peter goldsmith: i tested my mic and sound with the wizard and it keeps checking out fine

Barakat Mahmoud: Hello Guys!

Julie MacCartee (USAID/BFS): Hello Barakat! Thanks for joining!

Julie MacCartee (USAID/BFS): Welcome, everyone - please feel free to introduce yourselves in the chat box. Let us know your organization and what country you are joining from

Julie MacCartee (USAID/BFS): I am with the USAID Bureau for Food Security, joining the webinar from Washington DC

Barakat Mahmoud: I am also with the USAID Bureau for Food Security, joining the webinar from Washington DC

Julie MacCartee (USAID/BFS): Please fill out our intro polls to help us learn more about our audience

April Thompson - Agrilinks: Welcome everyone! We'll get started in a few minutes.

Archie Jarman: Hello, my name is Archie Jarman, I am the Program Officer with the Horticulture Innovation Lab at UC Davis. Thanks so much for this webinar!

April Thompson - Agrilinks: Welcome, Archie! We're glad to have you here. Your lab does great work!

Archie Jarman: Thank you!

Julie MacCartee (USAID/BFS): Glad to see some Agrilinks regulars on the webinar

terezie mosby: Hello Barakat this is Terezie from MSU

Dick Tinsley: dick tinsley from Colorado State University

Janie Dubois: Hello, this is Janie from the University of Maryland (USA)

Dick Tinsley: the advantage of being retired but still interested

Julie MacCartee (USAID/BFS): Hello Janie and Terezie!

Sarah Casey: Good morning, everyone. Sarah Casey from Tetra Tech ARD

April Thompson - Agrilinks: sounds like a great place to be, Dick!

April Thompson - Agrilinks: Welcome, Sarah!

Courtney Tamimie: Good morning everyone - Courtney Tamimie from the Soybean Innovation Lab,
joining from Illinois

Dick Tinsley: Great for throwing darts and spears

Chris Vincent: Hi all, I'm Chris Vincent with Fintrac Inc, focused on international agricultural development
projects. Joining from Washington, DC.

Chris Seremet: Hi from Chris Seremet (CRS)

April Thompson - Agrilinks: Hi Chris and Chris!

AV Tech -- Washington DC: If you're calling in, please mute your phone.

Julie MacCartee (USAID/BFS): We are excited to showcase the work of three Feed the Future Innivation
Labs today

Dick Tinsley: Thinking of darts let me start: Peter, soybeans are promoted for their N fixation potential but
the rhizobium is specific. In all the webinar I have attended i rarely hear it
mentioned. Thus what is the lab doing to make rhizobium inoculaum available to
small farmers, how effective is this, and how often to you sacrefice a couple plants to
check to see if they are well nodulated and fixing N

Joan Jennings: Joan Jennings/TOPS: Look forward to this presentation.

April Thompson - Agrilinks: Closing polls everyone - thanks!

Sarah Kehl: Is there a phone number that we can call into?

Julie MacCartee (USAID/BFS): Sarah we are about to start the audio

BOB NIWAGABA: am also online...BOB uganda

AV Tech -- Washington DC: 800-832-0736

AV Tech -- Washington DC: Room *9865920#

Russ Webster: Good Morning Everyone.

Sarah Kehl: Thank you.

April Thompson - Agrilinks: Morning, Ross! Getting started now.

AV Tech -- Washington DC: If you call in, make sure your computer sound is ****TURNED OFF**** (or else
you will have a feedback loop)

Russ Webster: Awesome!

Courtney Tamimie: I am getting feedback from someone talking on their phone

Chris Seremet: Mute your microphones, please.

Melaku Yirga: So noisy

April Thompson - Agrilinks: Yes, we hear that as well. *Mute please!*

Rod Dubitsky: Rod Dubitsky from BRAC UK

Joan Jennings: I can't find the mute button - usually it's obvious.

Akhila Vasan: Vasan from GMA SEF

Carol Moore: Carol Moore, Heifer International

Dick Tinsley: Patrick, aren't most of the beneficiaries of your nutrition effort expected to be heavily engaged in manual labor requiring up to or more than 4000 kcal per day. Does your nutrition effort factor this in, and if not how affordable are your innovations to those living on minimal wages and what are the rational compromises in adjusting the diet to their situation. Please review the webpage on hard choices webpage: <http://smallholderagriculture.agsci.colostate.edu/1028-2/>

April Thompson - Agrilinks: Joan, at the very top, you will see the phone icon. That is where you can mute your sound. It sounds like we're all good now!

Joan Jennings: It's not there this time, but as long as you don't hear anything, great!

Chris Seremet: I do not see the icon either.

Julie MacCartee (USAID/BFS): Most of you are getting your audio by computer, which means there is no need to mute. All is well. :)

Julie MacCartee (USAID/BFS): As a reminder, this webinar is being recorded. You can download the slides at the bottom left of your screen.

April Thompson - Agrilinks: Feel free to type in your comments and questions here throughout the presentation. We will be taking questions at the end.

Julie MacCartee (USAID/BFS): Does anyone else on the webinar work on programs in Nepal?

Carol Moore: Hi Julie, Heifer International works extensively in Nepal, primarily in the goat value chain.

Hem Roy: Hem Chandro Roy, Market Development Practitioner: Enjoying the nice presentation.

April Thompson - Agrilinks: Welcome Hem - where are you tuning in from?

Hem Roy: From Tanzania

April Thompson - Agrilinks: Wonderful! I worked on a tea project there way back when. Nice to have you joining.

Matthew Krause 2: Matthew Krause from Partnering for Innovation.

BOB NIWAGABA: nice presenattion, BOB Niwagaba from uganda

Julie MacCartee (USAID/BFS): Thanks for sharing, Carol. I'd be interested to learn more about the goat value chain.

April Thompson - Agrilinks: Thanks, Bob!

USAID Agrilinks 2: Welcome Bob!

Julie MacCartee (USAID/BFS): Hi Matthew, good to see you online

BOB NIWAGABA: thnx.....

Summer Allen: Summer Allen from IFPRI

USAID Agrilinks 2: Welcome Summer, thanks for joining us today.

BORA JEAN MARIE: BORA JEAN MARIE From BURUNDI

Brian Flanagan: Brian Flanagan from ECHO inc. , based in Fort Myers, FL

Julie MacCartee (USAID/BFS): Great to have attendees from Uganda and Burundi!

Julie MacCartee (USAID/BFS): Fort Myers is cool, too. ;-)

BOB NIWAGABA: @Agri links..i request the presenter to forward tome the datain rawform on mail to run further analysis and draw more conclusions fror Uganda bobitex2013@gmail.com

BORA JEAN MARIE: Thanks Julie MacCartee

christine chege: This is quite informative, thanks, Christine Chege from Dalberg Intelligence, based in Nairobi, Kenya.

Lark Walters: Lark Walters with Chemonics International, Agriculture and Food Security Practice, based in DC

Julie MacCartee (USAID/BFS): Glad to have you, Christine and Lark

Rod Dubitsky: Are there standards for detecting, remediating a, preventing nd addressing aflatoxin. . I'm thinking both from a field practice standpoint as well as government regulation of aflatoxin.

Julie MacCartee (USAID/BFS): Does anyone have questions for Patrick - about aflatoxin and nutrition, environmental enteropathy, or any other aspect of the Nutrition Innovation Lab's work?

April Thompson - Agrilinks: Bob - will forward your request on to Patrick.

Julie MacCartee (USAID/BFS): I think it's very interesting that the season in which a child is born has implications for nutrition outcomes

BOB NIWAGABA: thnx Thompson

April Thompson - Agrilinks: Thanks for your question, Rod

Anna Twomlow: How can Patrick's findings be scaled up to make an impact at country level to stop stunting?

Joan Jennings: Yes - I might think people would be eating less stored food when it is post-harvest; which foods have highest aflatoxin levels (before and after storage); any thoughts of adolescent girls eating foods of "lesser" quality in a broad sense?

christine chege: @Rob there have been some innovations aimed at measuring moisture levels in stored dry cereals, we have been conducting some research on some of these innovations among iothers aimed at addressing post-harvest loss and spoilage, happy to the report.

christine chege: to share*

Archie Jarman: Hey Christine

Archie Jarman: and Rob

Archie Jarman: We use what we call the DryCard

Lori Mercer: Hello, Lori Mercer from WSU. Late due to Adobe Conenct issues...

Archie Jarman: <http://horticulture.ucdavis.edu/main/drycard.html>

gary alex: The finding that sheep and goats in the house is related to 'environmental enteropathy is interesting. Has there been analyses of the social factors (caste, numbers of small ruminants owned, etc) that might affect this?

April Thompson - Agrilinks: Welcome, Lori - you missed the Nutrition Lab but we will make transcript and recording available afterwards.

Lori Mercer: TY

patrick webb: On animals owned, household status etc, we'll be looking into those factors. These are 'hot off the press' findings that we need to explore more.

April Thompson - Agrilinks: Anyone on here working in soy?

patrick webb: Dick - we don't only focus on affordability of quality diets, but also testing ways to measure energy expenditure using adapted accelerometers (in India, Ghana and Nepal). Important issue!

Dick Tinsley: Thank you Patrick

patrick webb: Christine - yes, finding ways to help households control moisture (and pests) would help them better manage foods post-harvest.

Dick Tinsley: Patrick, have you looked at the Hard Choice webpage. I would appreciate your feedback on that, and some examples if possible

Ahmed Kaban 2 (USAID): Thanks everyone for Questions. Please keep them coming and we will have a Q&A period at the end where we will answer as many Questions as time allows verbally

patrick webb: Hello Joan - it may be discrimination of adolescent girls (junior wives), but could also be that they are from poorer households. Exploring all this using multivariate analyses. What do people eat when, remains something we know far too little about. High levels of AF can be right there at harvest if climatic conditions were poor, but 'clean' crops can become contaminated later via poor storage. We need to look along the whole chain.

Archie Jarman: Hey Peter, I am curious if you also use the web (like Agrilinks) to share that knowledge, and/or, are developing a knowledge bank to fill in the gap when you cannot be on the ground?

Matthew Krause 2: To drive scale up and thus impact, it seems to me we should be talking more about connecting these innovations to private sector that can commercialize.

Joan Jennings: Thanks, Patrick.

April Thompson - Agrilinks: Great point, Matthew.

gary alex: SIL has impressive strategies.! With the one that stresses use of faculty rather than consultants to work with in country partners, how does SIL address the chronic issue of faculty having multiple (e.g., teaching) demands on their time such they are limited in the time and timing for travel and work overseas?

April Thompson - Agrilinks: Archie, I can tell you that all the Innovation Labs have activity pages on Agrilinks, so do check that out!

Archie Jarman: Will do, thanks April!

patrick webb: Anna, we first need to confirm that stunting is indeed linked to AF levels. That is still an open question; hence our research on this in Nepal and Uganda (and hopefully also in Mozambique). If we find this to be a strong link, the focus will have to be addressing all the hazard points (where AF enters the food supply) with technologies, improved seeds, enhanced storage, knowledge, etc.

Anna Twomlow: Thanks patrick

Russ Webster: April - thanks for a great set of presentations. I have to sign off now for another meeting. Thanks!!

April Thompson - Agrilinks: Thanks for joining Russ - do check out the materials later!

L Patrick Hanemann: April-How soon will the materials be made available?

April Thompson - Agrilinks: Look for that via email probably later next week. It can take some time to get the transcripts etc cleaned up.

April Thompson - Agrilinks: You can download the presentation directly from the lower left hand box here in the meantime.

Chris Seremet: Mr. IT, you are low now as well.

AV Tech -- Washington DC: Whoa

AV Tech -- Washington DC: Peter was nice and loud, he was using a different way to connect than us. We love Peter!

L Patrick Hanemann: Thanks

April Thompson - Agrilinks: Dena is our last presenter - keep the questions coming as we will only take them from the chat box here to read out afterwards.

BORA JEAN MARIE: Thanks patrick for your presentation Because you have raised many challenges that we can analyze in a normative context to fight against poor nutrition. Thanks again

Dick Tinsley: A little on the side, but i have a major health concern with post harvest, mostly what is the idea bag size? I see too many 100 kg bags that have to be manhandled, but fear that they are health hazards for the porter who are the poorest of the poor working on a piece meal basis. How often do they lose a few days work with wrenched back etc.

Joan Jennings: We have found some projects to use "low tech" techniques recommended by national ministries of agriculture to measure moisture, such as using salt or sugar in storage receptacle. Does the Lab have any experience/info on results with these?

Joan Jennings: sorry, receptacle.

Dick Tinsley: can't an experienced person tell moisture mostly by feel, not percies but accurate enough?

Rod Dubitsky: Are there any innovative finance models for more expensive or larger PH solutions? EG cost of digital moisture meters - can it be made affordable at the farmer level? What about larger gran storage silos? Examples of group ownership/leasing?

Dick Tinsley: what grain storage silos, most developed countrie are still on the bag system with all those silos mostly going unused

April Thompson - Agrilinks: Great questions, Rod! Definitely need to get the pricing/business model right on this.

patrick webb: Joan - there are multiple streams of work trying to understand the effectiveness of resealable bags, hermetic seals for plastic containers, etc. The Nutrition Lab collaborates with other Innovation Labs equally interested in such solutions.

Dick Tinsley: are those hermetic bags rat proof, or mostly just insect proof

patrick webb: Dick is correct in highlighting the problem of large bags (or other containers) being damaged and becoming compromised as a result. Size of bags, ways to appropriately clean the interior of previously used clay pots and pits, etc. all need to be explored further.

Natalie Roschnik: Who are the national partners?

Dick Tinsley: one of the problems with large bags is the tax system is often based on bags regardless of size thus encouraging large bags, but that should be adjustable.

James Rhoads: We have evaluated hermetic bags for peanuts at PMIL and had some issues with rats puncturing bags and also the lower respiration rate of peanuts, likely do to high oil content, the O2 levels did not reduce quickly or to low enough levels. We've also had issues with moisture migration within adequately dried peanuts. However, we did show good results of loss reduction and aflatoxin control

Virginia Sopyla: Dena, can you speak more specifically as to how the private sector is engaged in this research? Particularly as it pertains to work with commercial potential such as storage solutions?

Joan Jennings: solutions that reduce cooking time can have SO many additional benefits for women and the environment. Exciting!

Archie Jarman: Thank you Patrick, Peter, Dena, Julie and April! Extremely helpful and impressive work!

patrick webb: Appreciate your kind words, Archie!

Dick Tinsley: What is the typical storage time for farmers to hold their produce before selling it. This gets to the overall financial management system that emphasizes hold good in kind for up to 10 months after harvest. Please review the webpage: <http://smallholderagriculture.agsci.colostate.edu/financial-management-strategy-retain-assets-in-kind/>

AV Tech -- Washington DC: Thank you to our presenters. Great content.

patrick webb: Ah Dick, that's an important question. Depends on the crop, distance to market, uni- or bimodal rainfall patterns, etc.

Dick Tinsley: For some extensive commentary of smallholder agriculture please visit the www.smallholderagriculture.com website

Joan Jennings: Very interesting information at the smallholder website - thank you, Dick.

Nicholas Pyatt: Dena. Thanks for your insights on gender impact. Have you done any work on the response of women/wives to husbands/male household head decisions? Especially related to husband's decisions on income distribution within the household and his own spending decisions? We have found that if wives consider husband's decisions to be unfair or preventing them from performing their family care functions effectively, especially as a result of the introduction of a new crop, wives can undermine the new enterprise to enable them to return to their practices that enable them to care for the family more effectively. Is there any finding of this sort in your work?

Dick Tinsley: Patrick, it is more than that, most not wanting too much cash on hand, as sticking a finger in the cookie jar is greater hazard than post harvest losses. I was shocked by that when it first understood this

peter goldsmith: SIL: Dick Tinsley: I rarely hear it mentioned. Thus what is the lab doing to make rhizobium inoculum available to small farmers, how effective is this, and how often do you sacrifice a couple plants to check to see if they are well nodulated and fixing N? We do a lot of work in this area. We have partnered with N2Africa. The problem now is not access to inoc. There are a lot of suppliers, many imported and prices are low and affordable. The problem now, on which we focus, is the integrity of the supply chain. As a credence good, as you can imagine, there is a lot of inferior inoc- wrong strain, low pop of the correct strain, non viable rhizob, and adulterants. So thirdparty testing, training, and storage infrastructure are key.

peter goldsmith: Archie Jarman: Hey Peter, I am curious if you also use the web (like Agrilinks) to share that knowledge, and/or, are developing a knowledge bank to fill in the gap when you cannot be on the ground? yes. we are big webinar users. Our big effort now is to get better connectivity for our partners. This is an underinvestment that could really improve the impact of development efforts.

peter goldsmith: gary alex: SIL has impressive strategies.! With the one that stresses use of faculty rather than consultants to work with in country partners, how does SIL address the chronic issue of faculty having multiple (e.g., teaching) demands on their time such they are limited in the time and timing for travel and work overseas? Good question. The question i posed to each of the principal investigators was whether they wanted to be involved in development. This research program was very different. The faculty are committed to development first, and the research is only supportive. So they are very high energy because they are being placed on the frontlines of development, which is very exciting and rewarding.

AV Tech -- Washington DC: Patrick wins the red-eye award; he flew in late last night and still managed to log on early and join us this morning.

Nicholas Pyatt: Dick, I think that is a finding about sticky fingers in the jar is a big risk, but underpinned often by social norms which re-enforce this behaviour by husbands by seeing it as an entitlement and there being strong negative reaction if husbands try to be more "fair" to their wives.

patrick webb: Thanks AV Tech. These topics are so interesting I'm wide awake!

Dick Tinsley: The 10 month post harvest marketing period was first identified in Malawi but confirmed across several countries on various F2F assignments. thus need to be factored into marketing programs. It really makes sences with limited banking facilities. Did you check the webpage

Julie MacCartee (USAID/BFS): We have about 10 minutes left for questions. Please feel free to ask a few more, or re-iterate your question if it hasn't been answered yet. Thanks to Patrick and Peter for answering many of them in writing in the chat box

Dick Tinsley: For rice the buyer would simply take a few grains and rub them hard with thier hands to estimate moisture, this was in Madiberia. Tanzania

Julie MacCartee (USAID/BFS): We are bringing up some polls for you to answer - they will help us shape future webinars

Rod Dubitsky: Here is a link to research on salt and bottle method of moisture measurement. <http://article.sciencepublishinggroup.com/pdf/10.11648.j.ijsts.20150302.13.pdf>

Julie MacCartee (USAID/BFS): Interesting, thanks Rod

Joan Jennings: Thank you, Rod - we'll share this within our networks.

Dena Bunnell: Hi Nicholas, I don't know if we will get to it in the question period, so I'll try to answer briefly - we do have some finding related to women's ability to influence decision in the household. And our findings are divergent across our surveyed countries. We don't have any data on women seeking to undermine their husband, but that is very interesting! Happy to talk more offline!

AV Tech -- Washington DC: Thanks to our presenters and to everyone for logging on to check out the webinar.

Ahmed - USAID Agrilinks: Thank you for joining us everyone!

AV Tech -- Washington DC: You will receive an email with a recording of this event, along with other resources, in about a week or so.

Dena Bunnell: There were a variety of other questions that we didn't have time to get to. Please anyone feel free to reach out after the webinar - thank you all for participating!

Julie MacCartee (USAID/BFS): Thank you all for joining!

patrick webb: Thanks to all!