



SANITARY AND PHYTOSANITARY ISSUES TO ACHIEVING THE GLOBAL FOOD SECURITY STRATEGY: CASES ON FALL ARMYWORM AND AFLATOXIN

CHAT TRANSCRIPT

JUNE 20, 2018

PRESENTERS

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Julie MacCartee, USAID Bureau for Food Security

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John Lamb: Re aflatoxins, which affect 42 crops, just the top three of concern to africa amount to 80 million + hectares: maize 36 M, Groundnuts 14 M, sorghum 30M. How plausible is it to expect biocontrols like aflasafe to ever make a serious dent

John Lamb: Aflatoxins often/usually co-occur with other mycotoxins, some of which are also SPS hazards. Fumonisin in maize for example. How effective are biocontrols like aflasafe on other worrisome mycotoxins, and if not, what to do

John Lamb: In absence of development funding, incentives for aflasafe use are limited to some uses such as animal feed for poultry where costs are clear and binders are alternative. How about aflatoxin-sensitive extended, local GAP where improvements in marketable yield and quality provide market based incentives for better but low tech practices?

Adam Ahmed - USAID Agrilinks: Greetings everyone. Thank you for joining our webinar today. We will be beginning at 9: 30

April Thompson - Agrilinks: Good morning, everyone! Looking forward to today's presentation. Please introduce yourself in the chat box - where you're connecting from, what organization you're working with, what connection you may have to today's topic! We'll open up polls shortly too.

April Thompson - Agrilinks: Good morning from DC I should say -- I know we have folks connecting from many time zones!

FREJUS SODEDJI: Good mornin everyone!

marie-hélène kestemont: Hello, I'm from the Belgian Federal agency for the safety of the food chain. Also looking forward to today's presentation

Lawrence Kaptoge: Good morning. I am Lawrence Kaptoge from the International Institute of Tropical Agriculture (IITA) Ibadan, Nigeria. I am responsible for aflasafe Manufacturing plant designs and production across the continent

April Thompson - Agrilinks: Welcome, Lawrence! Great to have someone from IITA here.

Julie MacCartee (USAID/BFS): Good morning, all! Please excuse any testing we are doing

Matar Gaye: The lab analyses on aflatoxins can be costly and the communication on the results should be handled very carefully for obvious reasons. National Frameworks led by Government Authorities with support from Development Partners must be used whenever possible instead of dispersed actions .

April Thompson - Agrilinks: Thanks for your comment, Matar! Where are you connecting from?

Paola Sotelo: Good morning. I am Paola Sotelo, entomologist from the World Vegetable Center in Taiwan

Dick Tinsley: dick Tinsley back home in Colorado

Matar Gaye: Dakar, Senegal, FtF Naatal Mbay

Janeen Simon: Good Morning, Janeen from Feed the Children Guatemala - looking forward to the webinar

Stephen Walsh: Stephen Walsh here - Cape Cod.

Susan Chipandwe-Ng'ombe: Hello everyone i am Susan from HarvestPlus, Lusaka Zambia. I am interested in learning the findings as far as army worms are concerned.

April Thompson - Agrilinks: Welcome, Susan! Great to have HarvestPlus represented.

April Thompson - Agrilinks: Please do go ahead and start filling out the polls as we wait for the webinar to get started in about 10 minutes.

Norman Martin Casas: Good afternoon, I am Norman Martin, resilience and climate change adaptation advisor at Oxfam, based in Barcelona, Spain

April Thompson - Agrilinks: Welcome, Norman! Great to have you here.

Ashlei Sanders: Hello, I'm Ashlei Sanders, USDA FAS Intern, based in Washington, D.C.

April Thompson - Agrilinks: Welcome, Ashlei!

Lawrence Kaptoge: Alejandro Ortega from IITA is here with me.

FREJUS SODEDJI: Good morning everyone ! I am working with the NTFPs & Orphan Crop Species Unit at LEA/UAC-Benin but I am connecting from Ivory coast as PhD candidate in Food Security at CEA-CCBAD (University Felix Houphouet Boigny)

Patrice Hakizimana: Patrice Hakizimana, Agriculture Specialist, USAID/Rwanda

John Waugh: John Waugh from Integra LLC.

Bill Thomas: Bill Thomas, BEO at BFS, USAID Washington

April Thompson - Agrilinks: Bienvenue Frejus!

Patricia Neenan: Hi this is Patricia Neenan from CABI

April Thompson - Agrilinks: Welcome Patrice, John, Bill. FYI everyone you can use this chat box to ask questions of the presenters throughout the presentation as well as make comments and interact with one another.

Deland Myers 2: Deland Myers, Prairie View A&M University is participating this morning. I currently lead the new Integrated Food Security Center here on our campus.

April Thompson - Agrilinks: Hi Deland! Great to hear about the center.

Stephanie Lux: Stephanie Lux with Heifer International Zimbabwe

AV Tech: We'll be starting in a minute or two!

April Thompson - Agrilinks: Welcome, Stephanie! How many of you are joining an Agrilinks webinar for the first time?

Gerson Morales: Good morning everyone, greetings from Guatemala!

April Thompson - Agrilinks: Buenos dias Gerson!

Gerson Morales: Buenos dias April :)

Irlene Santos: Irlene Santos, Office of International Research Programs, Agricultural Research Service, USDA

Mary Beggs: Good day everyone. Mary Beggs from Cardno here.

April Thompson - Agrilinks: Welcome Irlene! And good to see you Mary.

Kari Onyancha: Kari Onyancha from Land O'Lakes International Development, based in U.S. but currently in Rwanda

Modibo Traore: Good morning everyone, greetings from Mali

April Thompson - Agrilinks: About to get started everyone! While we're waiting feel free to download the slides and report

frank owusu sekyere: Good afternoon. greetings from Ghana

Shiluva Chauke: Good afternoon Everyone, greetings from South Africa

April Thompson - Agrilinks: Welcome Kari, Modibo, Frank and Shiluva! Great to have so much representation from the African continent.

Mindy Spencer: My name is Mindy Spencer. I'm with the ADM Institute for the Prevention of Postharvest Loss.

jessica sullum shay: FAS USDA ISRAEL

April Thompson - Agrilinks: Welcome, Minday! I'm not familiar with that Institute - where is it based?

Mushtaq Memon: Mushtaq Memon, We-Empower, Atlanta, USA

Benoit Gnonlonfin: Benoit Gnonlonfin, ECOWAS USAID SPS LEAD

Greg Grothe: Morning - Greg Grothe with Land O'Lakes International Development.

Abdulai Jalloh: Abdulai Jalloh, CORAF, Dakar, Senegal

Barbara Stinson: Greetings from Washington, Meridian Institute listening in...

William Stewart: Wiliam Stewart-We-Empower, Pittsburgh, PA

Esther Ngumbi: Good morning, Esther Ngumbi from Urbana, Illinois

April Thompson - Agrilinks: Welcome everyone - thanks for introducing yourselves here. Sounds like we have a lot of expertise among our audience - do feel free to chime in here with your own experiences as well as questions for our presenters.

Andrew Bisson: Greetings all, Andrew Bisson, BFS Livestock Adviser

Michael Budde: Good morning - Mike Budde USGS FEWSNET

John Russell: Hi all. John Russell here, Eco Food Systems, Bangkok.

Pauline Simmons: Hello

Srinivasan Ramasamy: Greetings All - Srini Ramasamy, Safe & Sustainable Value Chains Flagship Program Leader, from World Vegetable Center, Taiwan

Mindy Spencer: The ADM Institute for the Prevention of Postharvest Loss is based at the University of Illinois at Urbana Champaign. We are coleads on the USAID PHL lab, but also oversee PHL projects in India, Brazil, Africa, and more.

AV Tech: FSN on Agrilinks! <https://www.agrilinks.org/activities/food-safety-network>

Seydou Samake: Seydou Samake USAID West Africa SPS Team Lead

Ayaovi Agbessenou: Good afternoon All, Ayaovi Agbessenou from IFDC, North and West Africa

Julie MacCartee (USAID/BFS): Mindy - I hope you'll share some ADM Institute resources today!

Jerry Brown: Greetings to all! Jerry Brown Agriculture Results Inc

April Thompson - Agrilinks: Oh, thanks Mindy - just didn't recognize the name but of course familiar with the PHL lab.

Julie MacCartee (USAID/BFS): Welcome, Seydou, Ayaovi, and Jerry!

John Lamb: Hello to all. John Lamb, Independent

April Thompson - Agrilinks: By the way everyone, you can click on the icon with the four arrows at the top of the presentation box to see this full screen.

Mindy Spencer: Hi Julie! and nice to meet you April. :)

April Thompson - Agrilinks: We enjoy collaborating with the Innovation Labs very much at Agrilinks!

Ayaovi Agbessenou: Thanks Julie

Sarah Ockman: Hi this is Sarah Ockman from IFC

Claudia Rodriguez: Hi all! Claudia Rodriguez from World Bank

April Thompson - Agrilinks: Hello Claudia! And welcome Sarah!

Julie MacCartee (USAID/BFS): In the poll at the beginning, i believe the most common point where you all have seen food safety hazards in the field has been at the production level

Julie MacCartee (USAID/BFS): I'm curious to know what food safety hazards you have witnessed in your work - please share!

Julie MacCartee (USAID/BFS): USAID resource: Fall Armyworm in Africa: A Guide for Integrated Pest Management: <https://www.agrilinks.org/post/fall-armyworm-africa-guide-integrated-pest-management>

Julie MacCartee (USAID/BFS): Also available for download in the "File Downloads" box at left

Modibo Traore: In Mali some of producers organization sell millet and sorghum through the world food program project namely Purchase for progress and the food safety hazards is required by this project at the production and storage levels

Esther Ngumbi: Thanks Julie, for the links

William Stewart: Would Country Self Sufficiency reduce the spread of the fall armyworm?

Dominic Reising: What insecticide was distributed by the Zambian government

April Thompson - Agrilinks: Thanks for sharing that, Modibo. And thanks for the questions, keep them coming!

Lee Gross: Food Safety Network Activity Page <https://www.agrilinks.org/activities/food-safety-network>

Lee Gross: SPS Web-based Distance Learning Modules <https://www.agrilinks.org/training/sps-plant-health-distance-learning-modules>

frank owusu sekyere: am much concern with the insecticide to be because we are having a major problem with this in ghana. the insecticide introduced by the agric ministry is not work working and some imported ones are very expensive for the farmers to buy

April Thompson - Agrilinks: Thanks, Frank - this is a common problem.

Faith Bartz Tarr: Hi, sorry for joining late. My introduction: Faith Bartz Tarr connecting from Ethiopia. We have activities here to reduce risks associated with aflatoxin and fall armyworm, and would love to learn the latest research and resources

April Thompson - Agrilinks: Welcome Faith! Good to see you here.

April Thompson - Agrilinks: Do check out the guide available for download at the left

Stephen Walsh: Curious to know about the average cost for pesticide application to managed fall army workm.

Stephen Walsh: Does anyone know of any simple econ work done on this?

April Thompson - Agrilinks: Good question, Stephen, noted...

Esther Ngumbi: How has technology been helpful in spreading information about available FAW management and solutions?

Tunji Olowookere: Good afternoon, I'm Tunji Olowookere from Nigeria. Just joining. Is the presentation available for download?

Keith Chanon: Question for Chris Peterson - In terms of multi-sectoral communication - do you think that FAO could play a coordinating role among the different sectors? If not, what would you suggest?

April Thompson - Agrilinks: Welcome Tunji - the presentation deck is available for download at the left, and the recording will be made available after the event to all registrants.

NARCISSE RUBAYIZA: What curative measures do they use to fight against fall army worm because in Rwanda, it destroys more maize plots

John Waugh: I'd like to point out that the tools and techniques used for port inspections by ag inspectors closely track with the tools and techniques for contraband, especially illegal wildlife products in trade. There should be a synergy here between USG efforts for wider impact. I've written on biosecurity in US ports and would be glad to share information.

FREJUS SODEDJI: how do we get policy makers to understand the need to invest in SPS, especially disseminating information/tools to smallholder farmers in Africa?

April Thompson - Agrilinks: Narcisse, do check out the guide as there are detailed interventions mapped out there.

Stephen Walsh: The FAO 2017 lessons learned document is available.

April Thompson - Agrilinks: Thanks, Stephen - can you share a link here?

Stephen Walsh: Safe to say - MSP's / multidisciplinary approaches... with great communication and feedback loops between producers, researcher, government extension, and private sector.

Stephen Walsh: <http://www.fao.org/3/a-bt556e.pdf>

Roger Day: Sorry to join late - just been in an FAO Coordination meeting on FAW! A regular meeting for all interested parties.

Benoit Gnonlonfin: Contribution: early detection, IPM use could help in the management of FAW. Awareness and farmers school training are critical

Yanet Rodriguez: Thanks Roger, how can people sign up to attend?

Stephen Walsh: FAO Briefing note on FAW: <http://www.fao.org/3/a-bs183e.pdf>

Roger Day: Send an email to Allan.Hruska@fao.org

Esther Ngumbi: thanks Roger

April Thompson - Agrilinks: Thanks for the resource, Stephen!

April Thompson - Agrilinks: Benoit, yes, early detection is critical. Welcome, Roger!

Roger Day: Zambis has already had some interceptions in EU of roses with FAW in them. So the risk to trade is real.

Ascher Kulich: Ascher Kulich, We-Empower, Washington, D.C.

April Thompson - Agrilinks: Welcome, Ascher!

April Thompson - Agrilinks: Not good, Roger. Is the EU mobilizing a response?

Roger Day: EU recently put emergency measures in place (requirements for exporters)

Roger Day: They have now done a risk assessment which may provide the basis to relax (or tighten) the requirements.

John Waugh: One final thought on the fall army worm. BFS should get in touch with Dr. Jamie K. Reaser, Exec Dir of the National Invasive Species Council, an interagency program housed at the US Dept of the Interior. She'd be a strong ally in mobilizing USG and private sector actors to assist.

Julie MacCartee (USAID/BFS): Thanks for your useful suggestions, John

John Lamb: There are more strategies than shown on this slide

fen beed: Greetings all - Fall Armyworm Monitoring and Early Warning System (FAMEWS) mobile app <http://www.fao.org/news/story/en/item/1106850/icode/>

April Thompson - Agrilinks: Thanks, Fen! Great resource.

fen beed: As Roger said - Allan Hruska leading country, regional and continental actions in Africa against FAW so please feel free to connect

AV Tech: To see the presentation full-screen, click on the four arrows icon at the top right bar of the presentation screen

Mindy Spencer: Our institute focuses a lot of resources behind proper drying and storage (and getting these technologies to smallholder farmers). I'm curious what drying/storage methods most of the attendees see with smallholder farmers in your regions.

fen beed: Framework for action against FAW and some partners - <http://www.fao.org/3/a-bt417e.pdf>

Mindy Spencer: these are critical to preventing aflatoxins.

April Thompson - Agrilinks: Good question, Mindy - what technologies do you focus on disseminating?

April Thompson - Agrilinks: Any questions for Ken?

Stephen Walsh: IITA BioSAFE is promoted as being a massive success story - do we have any case studies / objective reviews of this work regarding lessons learned - studies / key messages in terms of working with Bliocontrol products?

Matar Gaye: Are there specific biological or other reasons for the relatively higher vulnerability of maize and groundnut to aflatoxins compared to other crops grown in the same affected zones?

Benoit Gnonlonfin: Still regarding FAW management - EMBRAPA has developed IPM package to effectively manage FAW.

Harley Stokes: For adoption of biocontrol, do you see this being adopted by smallholder farmers and is this a financially feasible option?

April Thompson - Agrilinks: Benoit, do you have a link to that?

Benoit Gnonlonfin: yes, will share it soon

fen beed: Credit to Peter Cotty lab and Ken for evidence based and cost efficient biocontrol technology and dissemination to Africa through partnership with IITA under guidance of Ranajit Bandyopadhyay

Lee Gross: Frejus Soded Ji - good question! As I mentioned in my presentation, investing in SPS can be presented to policy-makers from multiple entry points. It's important to use the messaging that you think is best. Unfortunately, much policy making is reactive rather than proactive, so governments are responding after a pest or disease outbreak because of the economic and social costs occurred. Demonstrating how basic investments in SPS systems can deliver social and economic benefits to their populations is key.

Mindy Spencer: A lot of our work in this area has focused on modifying an affordable dryer from vietnam (STR dryer)...our research has shown it is easy to use/effective/affordable/scaleable. We also have been focused on hermetic bag distribution in India and Bangladesh. We've been sharing information regarding aflatoxins with trainings which has definitely helped with adoption.

April Thompson - Agrilinks: Mindy, have those solutions been taken up by the private sector?

Patricia Neenan: We have produced a range of free materials for farmers and extension agents on FAW including posters, videos, pamphlets that you can find here <https://www.cabi.org/projects/controlling-invasive-species/fall-armyworm/>

April Thompson - Agrilinks: Thanks, Patricia! We will have to collect all of these great resources being shared and upload to Agrilinks.

Njeri Okono: More on Aflasafe at www.aflasafe.com

Mindy Spencer: Yes, in Bangladesh we have seen a lot of private sector interest/scaling up of the technology. We also have a new exciting private sector partner interested in hermetic bags in India.

Lawrence Kaptoge: Harley Stokes: For adoption of biocontrol, do you see this being adopted by smallholder farmers and is this a financially feasible option? YES, IN NIGERIA OVER 30,000 FARMERS USE AFLASAFE AND COMMERCIALISE AFLATOXIN SAFE MAIZE AT PREMIUM PRICE BESIDES SAVING FOR FAMILY CONSUMPTION

Yanet Rodriguez: www.aflatoxinpartnership.org

FREJUS SODEDJI: We are all aware that drought increases pre-harvest aflatoxin contamination. So how best the biocontrol integrate this factor ?

Ranajit Bandyopadhyay: For some progress stories on aflasafe please visit www.aflasafe.com

John Lamb: I remain concerned about scalability in biocontrol use for aflatoxins. 1 million acres in USA mean 400,000 has. That is less than 1 percent of combined area for maize and groundnuts in Africa. Where would money and incentives come from to reach greater share of susceptible acreage in LIMICs?

Harley Stokes: @Lawrence, thanks - would love to learn more if you have any more info

April Thompson - Agrilinks: Thanks for all the great questions, all.

Sarah Ockman: can share the link for the guidance doc on biopesticides?

Benoit Gnonlonfin: EMBRAPA website for FAW management: <https://www.embrapa.br/en/busca-geral/-/busca/fall%20armyworm%20?buscaPortal=fall+armyworm+>

FREJUS SODEDJI: @ Ranajit, thanks for the link

Lawrence Kaptoge: Harley Stokes: @Lawrence, thanks - would love to learn more if you have any more info PLEASE VISIT AFLASAFE WEBSITE (WWW.AFLASAFE.COM)

Valeria Sanchez: Good morning, from a market perspective, could you please address the perceived consumer demand for low aflatoxin products? Is the final consumer willing to pay a premium price for afla safe groundnuts for example?

Ranajit Bandyopadhyay: Also see a report that was released today by the A4NH CGIAR Research Program: <http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/132704/filename/132916.pdf>

April Thompson - Agrilinks: That's a great question, Valeria...

April Thompson - Agrilinks: Thanks, Ranajit!

Ranajit Bandyopadhyay: In Nigeria, some end-users are paying between 8 and 17% premium for aflatoxin-reduced maize

April Thompson - Agrilinks: That's not insignificant, Ranajit. How is that being verified?

Ernest Teye: Is there a rapid way for detection

Gerson Morales: Is there any correlation between Aflatoxins and Chronic Malnutrition?

Dick Tinsley: in the open air market in Africa can you readily determine if the maize is aflatoxin free

Lawrence Kaptoge: In 2017, Over 100,000 ha of Maize and Groundnuts were treated with aflasafe products

John O'Connell: Can you discuss explicit linkages between FAW infestation and aflatoxin. That is, as FAW damages the maize crop, the risk for aflatoxin increases.

Stephen Walsh: Any thumbnail data on aflasafe application costs per HA?

Gerson Morales: especially for countries which consumes a lot of corn (tortillas)

Ranajit Bandyopadhyay: During the last 5 years, nearly 225,000 tons of aflasafe maize has been produced by smallholder farmers

Ernest Teye: Rapid detection of Aflatoxin is key in the fight?

Harley Stokes: @Ernest, yes there are rapid diagnostic tests that can be used in the field

Stephen Walsh: Ranajit, that is an amazing success story! What do we know about unit (HA) application costs?

Lawrence Kaptoge: Ernest Teye: Rapid detection of Aflatoxin is key in the fight? ONE OF THE KEY SOLUTION IS TO PREVENT IT

Harley Stokes: @Gerson, yes there is a link between aflatoxins and child stunting

Harley Stokes: There is an IFPRI article by Jef Leroy on the link between stunting and aflatoxins

NARCISSE RUBAYIZA: Have you ever tried the bio control using the push-pull technology introduced in some East African countries to prevent fall armyworm?

Gerson Morales: Thanks @Harley this is of a big concern in Guatemala

Harley Stokes: <http://www.ifpri.org/publication/child-stunting-and-aflatoxins>

April Thompson - Agrilinks: to Dick's question, Lawrence and Ranajit, can you explain how the Aflasafe products are differentiated in the market?

Harley Stokes: CRS recently came out with a technical brief on aflatoxin management for smallholder farmers: <https://www.crs.org/our-work-overseas/research-publications/aflatoxin-management-smallholder-farmers-maize-and>

April Thompson - Agrilinks: Thanks for sharing, Harley

Margaret Kroma: Can you speak briefly to SPS risks in livestock products?

Deland Myers: I will have to leave the webinar to attend another meeting. Thank you for the presentations and input from colleagues via the chat. Have a good day/evening.

Ernest Teye: Lawrence you are right, rapid detection could also overcome the fraud of substitution or mislabelling?

Ranjit Bandyopadhyay: Stephen Walsh: the cost of application (product Plus application cost) is \$1.55 per ha

Mindy Spencer: The DryCard from the FTF Hort Lab is an easy way to make sure stored grains are at the proper moisture level (key to avoiding aflatoxins) <https://horticulture.ucdavis.edu/drycard>

April Thompson - Agrilinks: THanks for joining!

Ranjit Bandyopadhyay: Stephen Walsh: The ROI of aflasafeis about 400%

FREJUS SODEDJI: @ Ranajit , thanks for the success stories. How is the price of aflasafe produced maize as compared to any other maize on local the markets?

RAHARISON Joséa: I have to leave, all,thank you very much

April Thompson - Agrilinks: Thanks for coming, Josea!

Guillermo Lizarraga: Could you please share any experiences with post-harvest techniques (at farmer level) to reduce the aflatoxin levels? Thank you!

Ranjit Bandyopadhyay: Our recent work in Mozambiaue (unpublished) has demonstrated that FAW infested maize grains have more severe aflatoxin contamination

Harley Stokes: @Guillermo, pls see this brief: <https://www.crs.org/our-work-overseas/research-publications/aflatoxin-management-smallholder-farmers-maize-and>

Stephen Walsh: Great Post Harley, as one of the principal authors did you have any econ data on the unit cost per farmer / per HA for the application of afflatoxin programs?

Glenda Paiz: Thanks for sharing this interesting information. I have to leave now.

Lawrence Kaptoge: April Thompson - Agrilinks: to Dick's question, Lawrence and Ranajit, can you explain how the Aflasafe products are differentiated in the market? THE END

USERS TEST AND ALSO PLATFORMS BETWEEN THE AFLASAFE
TREATED CROPS AND AFLATOXIN SAFE BUYERS

April Thompson - Agrilinks: Thanks for joining, Glenda.

Mindy Spencer: Guillermo, our institute (the ADM Institute for the Prevention of Postharvest Loss) works in that area. Feel free to email me at mindys@illinois.edu. I'd be happy to send you some info on our results/work.

Harley Stokes: @Stephen, we did not but that would be a great addition to our learning agenda!

Guillermo Lizarraga: @Harley, thank you!

Stephen Walsh: Thanks Harley, I think the economics is important to understand as we look at issues related to scale.

john bowman: IPM Innovation Lab (Virginia Tech/ICIPE) is working on push/pull against FAW - too early to discuss efficacy. a far more effective biocontrol measure will be the ID and dissemination of locally derived egg and larval parasites. IPM Lab progress along those lines is more advanced and positive...

Guillermo Lizarraga: @Mindy, thank you! I will contact you to get this info!

Valeria Sanchez: Thanks for that question Lawrence, I would like to get more insight as well.

Valeria Sanchez: Ranajit, could you please share how the premium prices for maize were achieved

Ranajit Bandyopadhyay: FREJUS SODEDJI: I mentioned the amount of premium in one of my previous comments

John O'Connell: Are the panelists familiar with using "push pull" IPM technology? Utilizing border grasses and intercropped grasses to protect the cereal crops from FAW? It has been developed by icipe for use in East Africa and Southern Africa.

FREJUS SODEDJI: @thank you Lee for the answer. It is just sad that we barely strive to make such balance in regards to strategies that can work best in our countries

Ernest Teye: Thanks for such good discussion. Rapid nondestructive detection could also be investigated if its not done. Example the use of NIR spectroscopy if possible?

Ernest Teye: Thanks I must go for now.

April Thompson - Agrilinks: We have about 10 minutes left for Q&A so if you have any burning questions, now is your chance! Moving to polls now as well, so please complete those.

Stephen Walsh: Many thanks Ranajit for your note of ROI of 400% for Aflasafe. Is there unit cost per farmer / per HA information for the application of AfflaSafe? If i am to include

activities in a program to address aflatoxin for 10,000 farmers and 20,000 HA, how might I cost this?

Srinivasan Ramasamy: ICIPE has validated and published some information on the effectiveness of 'Push-Pull' technology in managing FAW: <http://www.icipe.org/news/icipe-push-pull-technology-halts-fall-armyworm-rampage>

April Thompson - Agrilinks: Thanks, Srinivasan!

AV Tech: Poll time!

Srinivasan Ramasamy: A climate-adapted push-pull system effectively controls fall armyworm, *Spodoptera frugiperda* (J E Smith), in maize in East Africa (<https://www.sciencedirect.com/science/article/pii/S0261219417303216>)

April Thompson - Agrilinks: By the way, hope everyone is following food security policy month on Agrilinks this June. I will be facilitating two short special Q&As with policy experts next week, so do check out those upcoming events.

April Thompson - Agrilinks: <https://www.agrilinks.org/event/strengthening-national-policy-systems-bridging-disconnect-between-evidence-and-action-food>

April Thompson - Agrilinks: and the other: <https://www.agrilinks.org/event/ask-expert-qa-jeff-hill-supporting-food-security-policies-fragile-states>

FREJUS SODEDJI: @Ranjit, thank you I have just seen it (8-17% premium). I do believe that more sensitization on end users awareness about the risks of aflatoxins may even increase adopting the aflasafe technologies at farmers level.

john bowman: afla not just a problem on maize and beans, can be a problem on rice in asian tropics as well

April Thompson - Agrilinks: Also, check out Agrilinks' special collection of resources and posts on aflatoxin: <https://www.agrilinks.org/collections/aflatoxins>

Ranjit Bandyopadhyay: Valeria Sanchez: We replied on private sector led system to scale up use of the product. It involved a combination of technical, institutional and policy options under the AgResults initiative

Valeria Sanchez: Thank you Ranjit!

April Thompson - Agrilinks: We have posts on Agrilinks in the aflatoxin collection on Agrilinks that have videos created for farmers in various local languages

Esther Ngumbi: great presentations ! many thanks to presenters

AV Tech: <https://www.agrilinks.org/activities/food-safety-network>

Harley Stokes: Thank you!

April Thompson - Agrilinks: Thanks, Esther! We appreciated your contribution to Agrilinks.

Benoit Gnonlonfin: thank you all

Njeri Okono: Thanks . Illuminating!

April Thompson - Agrilinks: (on the topic)

NARCISSE RUBAYIZA: Thank you too

Modibo Traore: Thank you and if you have some ressources in french please share with me

Susan Chipandwe-Ng'ombe: Well done presentators! very informative

April Thompson - Agrilinks: Modibo - I believe there are videos in French here:

Julie MacCartee (USAID/BFS): Thank you very much for attending and sharing!

April Thompson - Agrilinks: <https://www.agrilinks.org/post/managing-aflatoxins-groundnuts-during-drying-and-storage>

AV Tech: Thanks for joining. If you have time tomorrow, check out the "Ask The Expert" chat: <https://www.agrilinks.org/event/ask-expert-qa-jeff-hill-supporting-food-security-policies-fragile-states>