



ECONOMICS OF RESILIENCE: AN OUNCE OF PREVENTION, A POUND OF CURE

CHAT TRANSCRIPT

January 25, 2018

PRESENTERS

Courtenay Cabot Venton, International Development Economist Consultant

Mark Lawrence, Food Economy Group

Tiffany Griffin, Center for Resilience at USAID

MODERATOR

Julie MacCartee, USAID Bureau for Food Security

USAID Agrilinks: Welcome everyone! The event will get started at 9: 30am EST, with some opening polls and introductions via chat box starting at 9am. Feel free to download and peruse the event resources in the meantime.

likare ignatius: Hi evey one ,am ignatius

April Thompson - Agrilinks: Welcome to today's webinar, jointly brought to you by Agrilinks and Microlinks! Please feel free to introduce yourself in the chat box and take the polls so we know who's joining us. We will get started promptly at 9: 30am EST.

April Thompson - Agrilinks: Hello, Ignatius! Where are you joining from?

Kenneth Tembe: hi everyone, im kenneth, joining from somalia

Mark L: I can hear you

Mark L: You can't hear me

April Thompson - Agrilinks: Hello Kenneth, welcome!

Senbeto Funte: Hi, I am Senbeto, joining from Ethiopia

AV Tech: Mark -- have you called in as we did on the test?

Mark L: I have turned my computer mike on as we did in the test

April Thompson - Agrilinks: Hello, Senbeto! Great to have you joining us. Are you in Addis?

Elizabeth Manda: I can hear you with difficulties but it is improving

likare ignatius: am in kenya

April Thompson - Agrilinks: Thanks, Elizabeth. We are working on testing tech with the presenters.

Elizabeth Manda: Am Elizabeth Manda in Malawi

Senbeto Funte : yes.

April Thompson - Agrilinks: Hello Elizabeth! Welcome!

April Thompson - Agrilinks: It's great to see so many people joining are involved in resilience programming.

Feel free to share here what you're working on and any experiences as well during the presentation.

Jim Yazman: Good morning. Jim Yazman. BFS ASF markets specialist

April Thompson - Agrilinks: Welcome, Jim!

Kristin Wilcox: Good morning, this is Kristyn from Global Communities. Cooperatives and Food Security Specialist.

April Thompson - Agrilinks: Hi Kristyn! Thanks for joining.

Julie MacCartee: Good morning everyine! Thank you for joining. Thanks for enduring our audio tests.

We'll get started in just over 10 minutes!

Julie MacCartee: I'm Julie MacCartee, Agrilinks webinar facilitator and Knowledge Management Specilaist with USAID/BFS

Jennifer Dias: Hi all. Jennifer Dias, Brooke, UN Advocacy Manager, currently supporting the development of our organisational position around resilience and working livestock.

Balint Nemeth: Dear All, Balint here from Hungary. Consultant at the World Bank Development Data Group, interested in resilience measurement and modelling.

Karine Garnier: ok! I am in

Bernard CARTELLA: Bernard, REgional Advisor FSL, Based in Dakar (Save the Children)

Carrie Hubbell Melgarejo: Component Lead for support-to-DFID component of the MQSUN+ project

Tala KHRAIS : Hello from Jordan, this is Tala KHRAIS PROGRAMME COORDINATOR at LOGOREP/Jordan /VNG-international

April Thompson - Agrilinks: Hi Jennifer, Balint, Bernard, Tala and Carrie great to have you here! Would be great to hear about your experiences.

Roberta Lauretti-Bernhard: Good morning/afternoon all Roberta Lauretti-Bernhard. Ag Consultant

Andrew Bisson: Good morning, Andrew Bisson, BFS, USAID

AV Tech: Thank you for joining and logging on early. Please fill out our polls! WE'll be starting soon

April Thompson - Agrilinks: Hey Andrew!

AV Tech: If you have any technical issues, please hover your mouse over my name and start a private chat

Tala KHRAIS: For further info on our local governance and resilience programme please check www.logorep.nl

AV Tech: Our presenters are joining us from around the globe using different technologies, so there may be slight variation in their audio levels and quality

Kelly McDonald: Good morning from Washington, DC! Kelly McDonald with USAID's SPRING project

April Thompson - Agrilinks: Hello, Kelly! Good to have you.

Kelly McDonald: Happy to be here and excited for the presentation!

Sophie Javers: Good Morning Everyone! Sophie here joining from the Feed the Future Innovation Lab for Assest and Market Access. Loking forward to the presentations!

Sophie Javers: Assets

April Thompson - Agrilinks: Hello Sophie!

Richard Choularton: Hi All, Richard Choularton from Tetra Tech here. Looking forward to hearing from Courtenay!

Richard Choularton: As well as Mark and Tiffany.

April Thompson - Agrilinks: Thanks, Richard!

Wilm van Bekkum: Hi All Wilm from Self Help Africa UK

Christine Forster: Good evening/morning, everyone. This is Christy Forster from Mercy Corps in Nairobi.

Laura Meissner: Laura Meissner in DC

April Thompson - Agrilinks: Hi Laura!:) Will be good to hear your thoughts on the topic!

Ric Hamic: Ric Hamic in Nairobi - DRR TA for World Relief US

April Thompson - Agrilinks: Hello Wilm, Christine and Ric! So great to see people joining from all over the world here.

Nicole Beetle: Hi everyone, Nicole Beetle from WWF US in DC

David Munthali: David Munthali, Blantyre Malawi from CRS

Reid Hamel: Hello, Reid Hamel from CSIS in DC.

claire okell: Hi all -Claire from Centre for Humanitarian Change (whatWorks) in Nairobi

Selamawit Ogbachristos: Good morning everyone. Selamawit here from World Food Programme, Rome.

GILBERTO Amaya: Hello all. This is Gilberto Amaya in Virginia. Looking forward to the discussion.

Edward Walters: Hello. Ed Witers from CRS here

Paul Johnston: Good Morning/Afternoon everyone, Paul Johnston from Tearfund based in London

Sarah Henly-Shepard: Hello all--this is Sarah Henly-Shepard at Mercy Corps in DC

Justin Prudhomme: Hi everyone, Justin Prud'homme from the USAID Center for Resilience

Frank Tembo: Frank Tembo, World Vision International based in Malawi

susan Bornstein: Hi Everyone. Susan Bornstein from The BOMA Project

Richard Ewbank: Hi - Richard Ewbank from Christian Aid

April Thompson - Agrilinks: Hi Susan!:)

Michael Felix: hi everyone. Michael Felix from BOMA Project.

Tamara Duggleby: Tamara Duggleby in Washington DC, small farming technologies consultant

Sonia Moldovan: Sonia Moldovan Mercy Corps DC

Ian winborne: Port-au-Prince has joined

Michelle Kurian: Michelle Kurian rom Digital Green. Working on ag resilience issues in Niger and Mali.

Alan Isaac: Alan Isaac from Land O'Lakes International Development in MN

chip bury: Hi Folks - Chip Bury from USAID Kenya and East Africa

April Thompson - Agrilinks: Hi Michelle! Great to see you, hope you are well :)

Ashley Aarons: Hi everyone. Great to be here. Im Ashley Aarons at MarketShare Asociates

Daniel Lapidus: Daniel Lapidus from RTI International, greetings everyone

Serena Suen: Hello! Serena Suen from Tearfund based in London.

Ben Rinehart: Good morning - Ben Rinehart from Tetra Tech ARD

Jacqueline Bass: Jacky Bass: FHI 360 Director Livelhoods joining from DC

Alonzo Wind: greetings from Alonzo Wind, formerly Regional Deputy Mission Director from USAID Southern Africa

Patricia DiVecchio: Patricia DiVecchio: Hello, glad to be here. CEO International Purpose

Stephen Anderson: Stephen Anderson here from the Food Economy Group currently near the fire in a chilly Nova Scotia!

Jennine Carmichael: Hi, Jennine Carmichael with FHI 360 in Washington DC

Emmanuel Tumusiime: Emmanuel Tumusiime, World Vision in DC

Iker Llabres: Hi all, this is Iker Llabres from MiCRO, based in Guatemala

Marc Tkach: Hello! Marc Tkach from the Millennium Challenge Corporation in DC.

Ahmad Alkasir: Good morning. My name is Ahmad Alkasir, and I work at Blumont in Arlington, Va

Ginevra Jarmaine: Hello everyone, Ginevra Jarmaine here, I'm a Project Manager at DAI on a Resilience and Response to Crises calldown facility

Sarah Sitts: Hi, Sarah Sitts, independent consultant, joining from San Francisco.

Lauren Caskey: Lauren Caskey, DAI, based in Golden, Colorado

Tom Spangler: Tom Spangler, Director of Resilience and Livelihoods with Save the Children

Ryan Hottle: Hi All. From USAID FtF Agricultural Diversification (AgDiv) Project., Palladium, Resilience

Advisor

Brian Hunter: Brian, AVP Hunger and Livelihoods, Save the Children

Matt Hobson: HI this is Matt Hobson, independent consultant, joining from Washington DC

George Dimitriou: Hi everybody, George Dimitriou from Greece

Ana Maria Loboguerrero: Hi everybody, LAM leader for CCAFS (CGIAR Research Program on Climate Change, Agriculture and Food Security).

Frederick Smith: Greetings all...Fred Smith from RTI International in DC.

April Thompson - Agrilinks: Welcome, everyone - do feel free to comment throughout the presentation here as Julie mentioned. We'll be holding all questions for the end.

Christopher Reichert: Chris Reichert, independent consultant, based in Lusaka, Zambia

Veronica Brown: Veronica Brown, Ultra Poverty and Social Protection at RESULTS in DC

Tessa Cannon: Hi everyone, Tessa Cannon, World Vision, Food Security and Livelihoods New Business and Economic Development intern. Washington D.C.

Funmi Akinyele: Good day everyone, I'm Funmi Akinyele, Ifrom Food Basket Foundation International (FBFI) a non profit NGO focused on nutrition and food security for vulnerable popluations, joining from Ibadan, Oyo State, Nigeria:)

Jenn Cisse: Morning all. Jenn Cisse, USAID/BFS Senior Risk Advisor

Paul Forsyth: Good morning. Paul Forsyth, Deputy Director, Food Security & Livelihoods at World Vision

Ric Goodman: Ric Goodman, DAI Europe director for resilience, and TL for Hunger Safety Net Prorgamme in Kenya.

Catherine1 Wallis: Hello all. Catherine Wallis, Climate/Environment Consultant, DAI Europe

Shoshana Hecker: Hello, Shoshana Hecker I am the Senior Technical Training Advisor with Trickle Up. I am working on the USAID/FFP-funded Graduating to Resiliency project in Kamwenge, Uganda, based in DC.

Julie MacCartee: Welcome and thank you for joining! A lot of great resilience-related experience on the webinar. Please don't hold back in sharing your experiences and asking questions!

Katie Biese: Hello all, Dinardo Rodriguez here subbing for Katie Biese at the MicroInsurance Centre at Milliman

Lazare Nzeyimana: Hi all. Lazare Nzeyimana, PhD student focusing on rural communities resilience to drought with a case study in Rwanda

Stephanie Acosta-Mikulasek: Hi everyone -- Stephanie Acosta-Mikulasek from the Bureau of Policy/Development Cooperation at USAID

Jonathan Cook: Jonathan Cook, Climate Change Adaptation Specialist, USAID

Julie MacCartee: Welcome, Sinardo, Lazare, Stephanie, and Jonathan!

Julie MacCartee: Lazare, we are always glad to have students on our webinars. Glad you could join

Lazare Nzeyimana: Thanks Julie

Eric Anderson: Hey folks, Eric Anderson here with USAID's Office of Food for Peace

Emmie Wachira: Hi Everyone, Emmie here from Young Professionals in Agricultural Development (YPARD)

Sandra Remancus: Hello. This is Sandy Remancus, Project Director for FANTA at FHI 360.

Lena Heron: Hello all, Lena Heron with BFS/MPI, but tuning in from Singapore!

April Thompson - Agrilinks: Wow, Lena - thanks for tuning in after hours!

Julie MacCartee: Hi Eric! Lena - glad you could join from Singapore! Emmie and Sandy welcome

Jackie Aldrette: Jackie Aldrette with AVSI Foundation in DC office

Julie MacCartee: All - you can download the presentation slides and the study reports in the "File Downloads" box at your left

Dick Tinsley: dick Tinsley in Colorado

Sophie Javers: Hi Lena!

April Thompson - Agrilinks: Hi Dick! Always good to have you with us!

Richard Choularton: Question for Courtenay: Are the numbers only for the case study countries? Not the overall humanitarian aid portfolio of USAID?

Sarah Gavian: Hi - Sarah Gavian from Kimetrica here. We've done some recent econometric work on Resilience Measurement for Niger and Ethiopia using LSMS data. (A different kind of approach).

April Thompson - Agrilinks: Interesting, Sarah - would be good to hear a bit about your findings; feel free to share here.

Mariot Jean: I everyone. I am Mariot. I work as resilience specialist at the USAID reforestation project in Haiti. A pleasure to participate at the workshop

ina Schonberg: Ina Schonberg from HarvestPlus (IFPRI) - interested in biofortified crop integration to planning for resilience and recovery programs

April Thompson - Agrilinks: Bienvenue Mariot!

AV Tech: To expand the slide, click on the four arrows pointing out at the top of the presenation window

Mariot Jean: Thanks April

April Thompson - Agrilinks: Hi Ina, interested to hear more. Love the work HarvestPlus does.

Murielle Brunache: Hi Mariot, I would love learn about your reforestation project in Haiti

Courtenay Cabot Venton: Hey Richard - the numbers are only for the 15 million people in the three countries, which represent 1/3-1/2 of the total food insecure in those countries.

Richard Choularton: Thx. Courtenay!

Lena Heron 2: What is the y-asix? What are the percents?

ina Schonberg: HarvetsPlus has facilitated local testing of crops in over 50 countries around the world - as target micronutrient levels increease in staple crops - they are a great way to make agric interventions more nutrition sensitive, and can support dietary diversity efforts.

Julie MacCartee: Please ask questions at any time. If you need clarification on something, your colleagues probably do as well

Tanya Boudreau: Hi Lena - it depends on which graph you're asking about. On the main HEA example graph the % represents minimum annual calorie requirements for a household.

Balint Nemeth: are these averages? what is the unit of analysis?

Balint Nemeth: households? villages?

Tanya Boudreau: The unit of analysis is households, disaggregated by livelihood zone and wealth group.

Alisa Wong: Is the safety net transfer the only resilience intervention the research studied?

Julie MacCartee: Thanks, Alisa - I will ask Courtenay to clarify what resilience interventions were studied

Michael Felix: Question for Courtenay: How do you view the current level of collaboration between safety net, humanitarian response, livelihood support actors and programs? To what extent is the level of collaboration a challenge to realizing some of the projected gains in coordinated, proactive investment?

Sophie Javers: Also interested in specifics on the internventions, thanks!

GILBERTO Amaya: What are the safety nets applied.

GILBERTO Amaya: Are they transfers of cash or inputs?

April Thompson - Agrilinks: Thanks for your questions, keep them coming!

Jim Yazman: What changes were made in the livestock component of the total income for the agropastoralist livelihood groups?

Dick Tinsley: carryover from good year to poor year was mentioned. what form did this carryover take, crop, livestock, cash, etc?

Richard Choularton: Question: How do we factor in disaster risk reduction?

Julie MacCartee: Richard - could you be a little bit more specific?

Michael Felix: Can you point to a great example of shock responsive, adaptive management in practice?

Julie MacCartee: Thanks for the questions, all - we will get to them shortly

Lena Heron 2: Richard, do you mean how do diasaster risk applied at different levels (such as sovereign level) affect the context for households?

Bernard CARTELLA: Do Early Response means Early action based on Outcome Analysis forecast+ triggers?

Dick Tinsley: also mentioned was annual calorie needs, what is the daily calorie estimate and does it account for manual labor exerted?

Bernard CARTELLA: Are thos etriggers predictive?

peter richards: Much of your evidence seems to be based on scenario modeling. To what extent have past investments in resilience led to cost savings in humanitarian aid? [Thanks for this great presentation!]

Christophe Belperron: When you suggest 'investing in resilience' - can you be more specific on what actions are behind 'resilience investment'?

Tanya Boudreau: Dick - the daily calorie requirements is based on the internationally accepted standard (used by WFP, FAO and others) of 2100 kcal per person per day

Devaprakash Ramakrishnan: One challenge is always that the benefits in good years is far over weighed by income from bad years many times multiples of good years harvest is eaten?

Lena Heron 2: impact evaluation of adaptive programming--yes, challenging!

Richard Ewbank: Thanks – very informative, the 6 takeaways v good. A recent external evaluation of our resilience work concluded that we had achieved a cost: benefit of 1 to 2.7 but we could have done even better if we had not focused on the most vulnerable so much, who are more expensive to reach. This suggests a trade-off between equity and cost: benefit and raises concerns about both using economic quantification as a measure on its own and in comparing different resilience interventions. Most resilience programmes prefer not to avoid the most vulnerable. Also have you thought about how the costs of climate change and environmental degradation might be incorporated into the model?

Richard Choularton: Julie: The analysis focuses on income and transfers. But DRR would reduce the impacts of shocks and reduce the resileince and survival deficits that HH face. It has been hard to integrate this into CBA, given the diversity of DRR actions and the lack fo real evidence of how much they reduce the impacts of shocks. Courtenay's earlier work on the economics of early response for DFID tried to look at this and identified some of these chillenges. I'm wondering what new ideas or progress has been made here? Thanks, Richard

Daniel Bailey: Was there also an evaluation of "private cash transfers" (eg - remittances)? How did levels of remittances impact the resilience effects?

Dick Tinsley: Tanya, that only covers basic metabolism and not manual labor, please revise that to 4000kcal per day

Ryan Hottle: Great presentation. One point: this is largely an econometric measure of resilience and does not look at environmental, health, gender, equity or other fairly important factors.

My question is: Have you been working on any predictive modeling that helps identify 'best bets' in terms of interventions, safety nets, improved practices, etc.?

Devaprakash Ramakrishnan: Is risk transfers were also reckened as part of safety net provisions?

Sarah Sitts: Many thanks for presenting this research. Did you look at all at effectiveness of savings behavior?

i.e. Were households saving their surplus income in good seasons? Were they able to save their surplus income in safe ways? Pastoralists often put their excess wealth in new livestock, which can rapidly deplete in value during drought.

Balint Nemeth: Resilience is a highly dynamic concept. The traditional baseline, midline, endline approach might be completely insufficient in capturing the magnitude of how shocks affect households' welfare and coping strategies. Ideally, data should be collected on a monthly or bimonthly basis. My question: how often were you collecting data and with what technologies (paper survey, mobile surveys etc)?

Ian winborne: There was a large dip in the livihoods threshold line in a coupleof years. Can you please explain why?

GILBERTO Amaya: Thank you for the answer.

Goder Yohannes: Hi all, Goder Yohannes just joining! Best.

Lena Heron 2: I understand the category of "benefits" was the avoidance of loss, but did you incude an estimate of the multiplied wealth that comes from income that accrues to those assets that are not lost?

Tanya Boudreau: Ryan - there has in fact been some predictive modeling work done on which interventions work best in different livelihood zones. Would be happy to share that as a follow up.

Ian winborne: How interventions that support economic growth at the national and system levels contribute to building resilience of poor and vulnerable people and households in vulnerable zonesin country?

Ian winborne: How does the push and pull approach applies to resilience programming?

Tom Spangler: Balint Nemeth: Agreed, the Center for Resilience is supporting Recurrent Monitoring Surveys (RMS) to account for this dynamic nature of resilience. It is typically carried out every other month in the wake of a shock as a means of determining how households are responding and what the sources of resilience may be.

Ian winborne: Tanya, can you please share with the whole group?

Rebecca Chacko: What are your assumptions/models around early HA? How did you determine when it would be triggered and how effective it would be?

Julie MacCartee: Jim Y - would you mind clarifying your question a bit? You had asked "What changes were made in the livestock component of the total income for the agro-pastoralist livelihood groups?"

Tanya Boudreau: Ian - yes. I'll make sure the facilitators share with all.

Michael Felix: thanks, Courtenay for response and great presentation.

Carlos Zelaya: Did you have any experience with local institutinal models of the carryover, like savings groups, etc.

Lili Mohiddin: How have donors responded to this research? What are there any gaps/ areas that require further analysis?

Bernard CARTELLA: meaning is the Early action far ahead of the shock

Bernard CARTELLA: or the response is provuide at the early occurrence of the shock

Ian winborne: Given the tratitional programmatic divdes between humanitarian and Development,

Programming resilience in a mission .looks like a great challenge, What are your thoughts?

Lena Heron 2: Bernard, they defined early response as in advance of negative coping

Karine Garnier: Thanks Balint Nemeth for your question. In this study using modeling, we used existing data mentioned earlier in the presentation.

Dick Tinsley: please visit the smallholderagriculture.com and look carefully at the page on dietary energy balance

Karine Garnier: you are correct that Resilience is very dynamic we are using high frequency data collection in USAID funded Resilience programs Ethiopia and Somalia

Ian winborne: Is there any different between shocks Responsive and crisis modifyer?

Balint Nemeth: I see. Glad to hear and learn more about that. Thanks for the response.

Ian winborne: note: all of the questions asked under Ian are from different people because we are a big group in Haiti attending the webinar!

Rebecca Chacko: Do you have a breakdown of costs for each scenario? E.g. for the final scenario, how much is spent on late HA, on early HA, on safety net and resilience?

April Thompson - Agrilinks: Ah, great, thanks for clarifying, Ian!

Karine Garnier: Balint you can find more on Recurrent Monitoring Surveys on https: //www.fsnnetwork.org/overview-recurrent-monitoring-survey-rms

Balint Nemeth: Karine, thanks a lot for sharing this link. I will check it after the presentation.

Sophie Javers: Hi Ryan, here at the Feed the Future Innovation Lab for Assets and Market Access, we've done some modeling on social protection programs in Kenya that finds similar results to this study. Our researchers also took an extra dive into the potential for index insurance as a particular resilience building mechanism. If you're interested in reading about this study, you can find it here: https:

//basis.ucdavis.edu/publication/policy-brief-resilience-based-protection-blunts-climate-changes-impact-poverty

Karine Garnier: Thanks Ian Winborne , thank you for your question. Crisis modifier is an example of a shock responsive tool

Ahmad Alkasir: It'd be interesting to discuss how early interventions apply in the context of conflicts, and what good years would mean. I think one of the peculiarities of conflict context is that refugees and IDPs lose access to the means of production, and host communities do not facilitate access to the labour market

April Thompson - Agrilinks: Thanks, Sophie - great resource. Do you have that also on your Agrilinks page?

Ahmad Alkasir: I meant host countries

Sarah Gavian: Hi.. if any one wants FEWSNET Kimetrica papers on Resilience, please contact me at sarah.gavian@kimetrica.com

Julie MacCartee: Thank you all for your excellent questions!

April Thompson - Agrilinks: Sarah, feel free to share those on Agrilinks as well!

April Thompson - Agrilinks: Any questions we don't have time to get to, we will address in a written Q&A posted to Agrilinks along with post-event resources, so if you still have lingering questions, feel free to type them in here.

Richard Choularton: Thanks Courtenay!

April Thompson - Agrilinks: FYI Technical Guidance for Global Food Security Strategy on Resilience is here: https://feedthefuture.gov/resource/global-food-security-strategy-guidance-resilience

Lena Heron 2: I completely agree with Courtney's point that longitudinal data/anaylisis are critcial--and related to my question about mulitplier affects from protected assets. Michael Carter did some interesting empirical work with panel data from South Africa that

showed the additional return/benefits that accrued over time. Sophie Javers: Does AMA have a brief on Michael's KIDS work?

Lena Heron 2: Kudos to the Center for Resilience, HEA team and Courtney for an amazing study and compeling case for investment in resilience!

Richard Choularton: Thanks to the team for a great report and presentation. We need more of this kind of work!!!!

Karine Garnier: sharing here an important ressource on Resilience measurement and analysis work https: //www.fsnnetwork.org/resilience-evaluation-analysis-and-learning-real-award

Carlos Zelaya: Thanks,

Tom Spangler: Thank You Karine!

Kenneth Tembe: learning a lot on economic resilient. Thanks

April Thompson - Agrilinks: Do also check out all the material posted on Agrilinks under Resilience at this link: https://agrilinks.org/topics/resilience

AV Tech: Poll time!

April Thompson - Agrilinks: Please do give us your input on the webinar here via the polls, thanks!

ina Schonberg: Great presentation and discussion - thank you! Side question - did you gain insights on agric choices and diversity shifts, i.e., beyond productivity/yield trends which you mentioned - possible link to/factor for resiliency?

Nathaniel Scott: Great presentation and research!

Jonathan Cook: Another reason that longitudinal analysis is important goes back to the question someone asked about climate change and looking at how the frequency/intensity of droughts (or other shocks) may be changing over time.

April Thompson - Agrilinks: Great point, Jonathan.

Maxim THELIAR: My name is Maxim Theliar from the resilience component of the USAID reforestation project, thank you very much for your presentation and thank you all for your participation

Julie MacCartee: Thank you all so much for joining and discussing this important topic!

Maxim THELIAR: Thank you Julie

Ric Hamic: How does \$3 to \$1 compare to previous estimates? It seems like a smaller difference than I had seen in the past?

Michael Felix: good question, Ric

Karine Garnier: Here is the page the Courtenay mentioned https://www.usaid.gov/resilience/economics-resilience-droughthttps://www.usaid.gov/resilience/economics-resilience-drought

ina Schonberg: interested in the breakdown of productive activities in which people invested - did this change over time

Ahmad Alkasir: Karine, link doesn't work

Kristin Wilcox: the link isn't working

Ahmad Alkasir: page not found

April Thompson - Agrilinks: looks like link was copied twice

April Thompson - Agrilinks: https://www.usaid.gov/resilience/economics-resilience-drought

Karine Garnier: https://www.usaid.gov/resilience/economics-resilience-drought

Sophie Javers: Thanks for this presentation. Such important research! What are the future plans to bring this research to an even broader development audience?

Maxim THELIAR: thanks you April for the link

AV Tech: We will be wrapping up soon. If you haven't filled out the polls, now is the time to do so.

AV Tech: You will receive an email with a link to this recording and other associated materials

April Thompson - Agrilinks: The studies are all on the Agrilinks event page - you will receive a follow-up email with a link to it and additional resources such as the recordings.

April Thompson - Agrilinks: De rien, Maxim! Thanks everyone for joining today!

Mario Sapon: Thank you very much

Richard Choularton: Thanks all!

Ryan Hottle: Thank you very much. Very informative. Look forward to reading reports in more detail.

Karine Garnier: Thank you to all!

Lena Heron 2: thanks all and good night!

Kristin Wilcox: Thanks! Looking forward to the next one!

Christopher Reichert: Thanks!

Selamawit Ogbachristos: Thank you!

Sophie Javers: Thanks!

Maxim THELIAR: thamks

Peter Hobby: Thanks all!

Michael Felix: thanks everyone! great webinar

Julie MacCartee: Thank you for joining!nk you Diana!