

MARKET-LED INTERVENTIONS FOR SEED SECURITY RESPONSE

CHAT TRANSCRIPT

JULY 1, 2020

PRESENTERS

Stephen Walsh, USAID Bureau for Humanitarian Affairs

Jean Claude Rubyogo, Pan Africa Bean Research Alliance (PABRA)

Jules Keane, Independent Consultant

Kate Longley, Catholic Relief Services

MODERATOR

Julie MacCartee, USAID Bureau for Resilience and Food Security

Adam Ahmed: Greetings Everyone, the webinar will begin in about 30 minutes

Marilyn Balderas: Good morning/Good evening! Marilyn Balderas from the Philippines

Marilyn Balderas: Thank you Adam for your warm welcome!

Treeza Iman: Treeza from Malawi Good afternoon.

Justice Frimpong : Good Afternoon, Justice Frimpong from Ghana

Amias Aryampa: Greetings and warm regards from South Sudan

Inhyuk KYE: Good Afternoon! Hi everyone

Eric Tegei: Greetings from Kenya Seed Company, Nairobi, Kenya

Jean Claude Rubyogo: hi Adam

Julie March: looking for #

Stephen: Hui Julie: 1-800832-0736

Stephen: sign in: 9865920

Zia Ahmed: Hello, this is Zia Ahmed from Bangladesh but now stuck in Vienna, VA and learning from the Agrilink webinars for lessons to utilize in Bangladesh.

Stephen: Great that you are with is Zia.

Jean Claude Rubyogo: are you to get me

Dileepa hari: Hi

Praxedis Dube: Hello everyone. Praxedis Dube, Zimbabwe.

Zia Ahmed: @Stephen Thanks.

Papias Binagwa: Hi Everyone!!

Dileepa hari: I'm from India. Working as faculty member in University of kerala in management dept

Zia Ahmed: YES

Justice Frimpong : Hi Justice Frimpong from Ghana

Silvanus Mruma: Yes. The Audio is good. Silvanus

Anne Camara: Hi Anne Camara from Senegal

Papias Binagwa: Audio is ok to my end

Dileepa hari: For me, it's a nice experience with you people

Benoit Joseph Batiemo: Hello everyone, Joseph from Burkina Faso

Noel Templer: Hi Everyone. Noel Templer from ABC-PABRA, Nairobi - Kenya

Muhumed Mohamud: Hello I'm Muhumed from Somalia

John Alosias: Hi, it's John Alosias from University of Juba in Juba, Republic of South Sudan.

Silvanus Mruma: I am from Tanzania. Joining from Morogoro

Inhyuk KYE: I'm from Korea Hi Everyone

Dick Tinsley: Dick Tinsley still detained in Virginia

Papias Binagwa: From USA

Pamela Hobbs: Virginia, USA

Sheila Halder: hello, Sheila in the UK, working in Eastern Africa

Daniel Otwani: Joining from Perth Western Australia

Sagar Kafle: Sagar Kafle joining from Nepal

Dileepa hari: Sorry audio not clear

Molly Schneider: Joining from New York, supporting the DRC and Sahel region for IRC

Dick Tinsley: sound check please

Dick Tinsley: thank you

Thomas Preindl: Hifrom

Julie MacCartee (USAID/RFS): Welcome, everyone! Looking forward to this discussion on seed security

Dileepa hari: Thank you

Thomas Preindl: Hi from Austria Thomas

Manasseh Kwangware: Manasseh here from Zimbabwe, hello everyone!

Elamien Mohamed: Hi I'm Elamien Mohamed from Ministry of Agriculture and Natural Resources Sudan

Gary Alex: Hi! Gary Alex in Virginia.

Zia Ahmed: @Adam would greatly appreciate if you kindly share your official email contact..

Philippe Mougine: Hello everyone. Greetings from Philippe from the UK (with CAFOD/Caritas)

ROBIN BURUCHARA: Hi Everyone!

Dick Tinsley: i remain very concerned about the seed industry, the limited capacity to serve all smallholder farmers and need to enhance the seed quality in the informal seed market

Kayode Idode: Hi everyone. This is Kayode Idode from the FGN/IFAD Value Chain Development Programme in Nigeria. Looking forward to this webinar on Seed Security

Hamdino Ahmed: Hello All. This is Dr. Hamdino Amed, Egypt

Julie March: Julie March - good morning from USAID

Nana Aminata TOURE: Waleykoum Salam

Claude Nankam: Hi everyone. I am Claude Nankam from Food For The Hungry, Washington, DC

Kevin Doyle: Greetings from Nairobi, Kenya!

Jean Claude Rubyogo: Hi Claude

Jean Claude Rubyogo: long time

Inhyuk KYE: I really wanted to join in AgriLinks Webinar, finally I got the chance today. I'm so glad to join here

Kate Longley: Hi @Dick Tinsley, I share your concerns. In today's presentation we hope to highlight the role of the informal seed system.

Jeremy Davis: Hi everyone, this is Bablu Barua from iDE- Bangladesh

Nana Aminata TOURE: Good Afternoon All, I'm Nana Aminata Toure form LWR based in Burkina

Edward Walters: Hi. Ed Walters from CRS. Hi Kevin!

Kevin Doyle: Hey Ed!

Elamien Mohamed: I am looking for community based seed production

Dick Tinsley: loud and clear thank you

Natali Maidl de Souza: Good morning! Nátali Maidl de Souza, State University of Ponta Grossa, Brazil

David Spielman: Hi everyone. This is David Spielman, IFPRI

Inhyuk KYE: Great

John Alosias: Great & clear voice Thanks

Liz Ogutu: Hello from Nairobi, Kenya!

Carl Wahl: Carl Wahl, Concern Worldwide

Donald Mavindidze: Donald Mavindidze- HarvestPlus

Collen Shoko: Hi Collen Shoko Mercy Corps

David Resetar: Hi I'm David working at a small MFI in northern Uganda

Rolf Lienekogel: Hi, this is Rolf from Germany, many thanks for organising this webinar!

Neil Miller: Neil Rowe Miller, Tearfund/CFGB

Aaron Larsen: Good morning! This is Aaron Larsen with Samaritan's Purse.

Aarti Mahajan: hi. Aarti, from MEDA , Tanzania

Oscar Carrion: Good morning. Oscar Carrión. US Army Veterinary Services.

Greg Traxler: Good morning everyone.

Myo Ma Ma Than: Hello! Myo Ma Ma Than from Swisscontact Myanmar

Osagie Aimiuwu: Hello everyone, Dr. Osagie, USAID/Bangladesh.

Willy Mulimbi: Hello everybody

Essegbemon Akpo: Hi. Essegbemon Akpo from ICRISAT

KASHEMWA Arsene: Hi everyone from Kinshasa-DRC

Emmanuella Olesambu: Hi everyone, Emmanuella Olesambu FAO

Cédric Reyes: hello, Cédric, regional agronomist in west Africa for ICRC

Macki Cissoko : hello everyone, Macki Cissoko USAID-Mali AEG office

Hamdino Ahmed: Hello Jean Cleadue, long time

Ezana Kassa: Hi. Ezana Kassa FAO

Farhad Hossain: Hello Everyone, Farhad Hossain, USAID/Bangladesh

Jean Claude Rubyogo: Hamdina

Jean Claude Rubyogo: keep in touch

Stephen: Greetings Willy@

Hamdino Ahmed: send me you contacts by email

Cecilia Benda: Cecilia Benda Agriculture Adviser Concern Worldwide

Hamdino Ahmed: mine is hamdino@yahoo.com

Abdal Monium Osman: Hi everyone, Abdal Monium OSman FAO

Emmanuel Kwabo: Hello, Emmanuel Kwabo for the NGO CEDERU KIBUTUTU Asbl in Kiwanja, Rutshuru
DRC

Adam Ahmed: Hi Macki, glad to see you again!!!

Julie MacCartee (USAID/RFS): See this post for more on Agrilinks' seed systems month:
<https://www.agrilinks.org/post/june-seed-systems-month>

Aviyan Pandey: Hello everyone. Hope you all good.

Stephen: Greetings Emmnuel - delighted you are here!

Zia Ahmed: @Farhad Hossain, hello from Zia Ahmed now in Vienna, VA.

Claude Nankam: Hi Jean Claude. I am happy that through this webinar I can reconnect with you

Krista Isaacs: Hello Everyone!

Jean Claude Rubyogo: claude - sure

Jean Claude Rubyogo: j.c.rubyogo@cgiar.org

odosepatmarvin1 Patrick Marvin: Hello Everyone

Ian MacNairn: Ian MacNairn, ZemiTek and AFR/SD

Elizabeth Moore: Elizabeth Moore, Trees for the Future. Happy to be here.

Stephen: Greetings Ian.

rob groot: Rob Groot, IFDC, from Lome-Togo

Holli Jordan: Holli Jordan from LWR. Glad to learn more about the importance of supporting seed systems and that LWR partner approaches were part of the study.

Abdul Montazir: Abdul Montazir from Virginia USA

Julie Mayans: Julie Mayans, FSL advisor at Solidarités International

Bellah Mpofu: Hi everyone.

Racey Henderson: Racey Henderson - SEADS Coordinator (seads-standards.org)

Paul Gamba: Hello everyone

David DeYoung: Hi everyone. David DeYoung from the Feed the Future Innovation Lab for Legume Systems Research

Harry Ngoma: Greeting from Zambia

Humnath Bhandari: Humnath Bhandari, IRRI Bangladesh

Lusike Wasilwa: Hi Lusike Wasilwa from Kenya Agricultural & Livestock Research Organization

Julie MacCartee (USAID/RFS): Welcome everyone! Thanks for introducing yourselves.

Hamdino Ahmed: Hi Lusike,

Licinia Cossa: Hi everyone, Licinia Cossa MADER Mozambique

Kellie Hynes: Hi everyone! Greetings from CRS Tanzania

Elizabeth Laferriere: Elizabeth Laferriere, Land O'Lakes Venture37

Noel Templer: Hi @Paul Gamba. Long time!

Claudine Inamahoro: Hi, everyone I work for Catholic Relief Services as a TA for Markets and Livelihoods.

Gary Alex: The program has a broad country agenda and diverse strong partners. What is the total budget?

KASHEMWA Arsene: Welcome Elizabeth!

Paul Gamba: Am well, Noel

Loretta Byrnes: What is the role of the private sector in producing foundation or commercial seed in Malawi, Zambia and other countries in Africa? Is CIAT or the NARS still producing the breeder and foundation seed?

Hamdino Ahmed: @Julie , will we get the presentation file

Julie MacCartee (USAID/RFS): Hamdino - yes, it will be available for download at the end of the webinar, and will be emailed to you with the post-event resources

Hamdino Ahmed: Grear Julie

Orla Kilcullen: Hello from Self Help Africa

Nazim Ali: Hi All, From Pakistan

Julie Mayans: if available, can you provide the links to those 2 studies please?

Kate Longley: Review of Practice and Possibilities for Market-led Interventions in Emergency Seed Security Response - Stephen Walsh and Louise Sperling https://pdf.usaid.gov/pdf_docs/PA00WPBN.pdf

Orla Kilcullen: Good question Loretta - breeder seed is often a challenge - we do a lot of linkages with research institutions across our programmes but foundation seed can be a real challenge

Daniel Otwani: Whats the role of the farmer saved seed in the humanitarian setting. whats the feasibility?

ELIUD BIRACHI: Hi Papias

David Resetar: I also wanted to share my contact with anyone who might have experience with seed systems or seed multiplication schemes specifically in Uganda. Many thanks! david@cycleconnect.org

Julie MacCartee (USAID/RFS): Thanks for your questions - please post them here at any time

Jean Claude Rubyogo: In case you would like to check on pabra website : <http://www.pabra-africa.org/>

Kate Longley: The case studies are presented in the report which is available here:
https://pdf.usaid.gov/pdf_docs/PA00WPBN.pdf

Ian MacNairn: Don't we have a more up to date figure for seed aid than 2011?

Neil Miller: Host appears to have the Force Presenter View selected, which disables the Full Screen button on the slide deck. Can you change this?

Ann Koontz: Is others AID support?

Rolf Lienekogel: is this a global picture on where farmers get their seeds? Differences between Asia and Africa?

Adam Ahmed: We will have the slide deck available for download at the end of the presentation

Larry Schaefer: for our aquaponics operations we import some of the seeds and some we get locally. all are non-gmo or heirloom or heritage seeds

Dick Tinsley: here is my reference to improving seed through the informal markets:
https://webdoc.agsci.colostate.edu/smallholderagriculture/The_Crop_Genetic_Pump.pdf

Carl Wahl: Can see most of figures ... not able to expand the slide deck.

Neil Miller: It would be nice to see the slide deck clearly while the speaker is presenting it!

Carl Wahl: *can't see

Licinia Cossa: local market is an important source of seeds, how to ensure quality?

Aryemo Sunday Ocaya: How much % is seed Aid accounting for? because in developing Countries seed Aid tends to take a bigger %!

Verona Parkinson: Verona Parkinson from AGEMA, Mozambique

Adam Ahmed: Thanks Neil. the charts are a little hard to read, but we will be sharing all of the webinar resources

Neil Miller: If you unselect "force presenter view" it will allow us to maximize the slide deck pod

Jean Claude Rubyogo: Hi Neil

Jean Claude Rubyogo: Nice to see you

Jean Claude Rubyogo: are you in arusha

Oluwaseun Omikunle: Hello Dear Cooleagues, Am Omikunle O.A. from WACOT Ltd, Nigeria

Larry Schaefer: when you're planning your plantings you have to ensure you'll have enough in your harvest for seeds for the next planting.

Neil Miller: Habari JC?

Neil Miller: Uko wapi?

Bellah Mpofu: Policy interventions that include the informal sector would be useful.

Julie MacCartee (USAID/RFS): Thanks for the suggestions on the full-screen settings - we are seeing what we can do

David Resetar: Can packaging be an effective training tool when introducing improved seed varieties?

Melissa Schweisguth : Are you able to enable full screen option in share pod with the slides? It's enabled in Caption & Who'e Speaking but not slides

Racey Henderson: Why was the documentation not easy to decipher?

Neil Miller: Can only full screen captions and whos speaking, not slide deck

Neil Miller: Yea!! Now it's enabled. Thanks.

Larry Schaefer: Aquaponics coming to Guinea and Liberia hopefully before the end of the year depending on the virus.

Bellah Mpofu: Would be interesting to find out on the demand side whether farmers are sourcing seed from the informal sector out of choice or whether this is beacuse of issues of availability and access. of seed in the formal sector.

Racey Henderson: Why were these chosen as enabling features? Did these actions lead to better livelihood outcomes? Higher yields?

Gary Alex: Are there key constraints in "emergency" nature for design of these seed activities? The problems seem to lie in inadequate understanding of the local systems. Analyses of the local seed systems and social analyses of beneficiary preferences, linkages, and capabilities would take time.

Ann Koontz: Can you comment on the donor restrictions in sourcing seed and lessons on how to support informal sector on seed supply given donor requirements?

Lauren Pincus 2: Hi Racey! This is Lauren, I've emailed you recently. I think Stephen's point about documentation not easy to decipher is also my experience - that project reports often do not have the details you need to piece together the story as an outsider reading the report. Even things like "type of seed provided" is not always there

Md. Mustafizur Rahman: Hello Everyone. I'm Mustafizur rahman from Bangladesh worked with Metal agro ltd., USAID Horticulture project.

Nana Aminata TOURE: What was the role of the State in seed systems?

Ann Koontz: So where is AID support then

Carl Wahl: @Ann Koontz - Yes. Would add how to address dictates around supporting informal sector who lack financial / logistical infrastructure sufficient to meet donor reqs.

Ann Koontz: Given that AID support for seeds has gone up per your earlier slide.

Donald Mavindidze: Im also sure there are differences within Africa as well and different crops?

David Resetar: From my experience farmers often prefer informal and local seed sources because they perceive hybrids as 'fake'. How true is that assumption and how often should actors promote improved varieties when local farmers are comfortable with what they have?

Nazim Ali: Does this pie chart based on all seeds in all regions? Because it is different for hybrid, open polinated and traditional varieties. Thanks

John Hoven: where do local markets get their seed?

Kate Longley: The data in the pie chart comes from McGuire & Sperling (2016) Seed systems smallholder farmers use: <https://seedssystem.org/wp-content/uploads/2016/01/Seed-systems-smallholder-farmers-use.pdf>

Nazim Ali: Great, Thanks

Kate Longley: The data comes from Malawi, Kenya, DRC, Haiti, S. Sudan and Zimbabwe

David Resetar: Packaging on seed

David Resetar: As an alternative to formal trainings

Carl Wahl: @John Hoven great question ... are those people selling the cereals / pulses as food (and people purchase it for planting)?

Donald Mavindidze: mmmmmm

Neil Miller: I think he means educational messages on packaging

Dick Tinsley: local markets get seed from the grain market and label it as seed!!

David Resetar: Merci!

Dick Tinsley: For self pollinated that is not a major problem but not for hybrids

Silvanus Mruma: Local Source entails promoting use of "Farmer Saved Seeds". How does it fit with most USAID project designed to foster Formal private sector seed value chains. How is it possible for CIAT and other CGIAR centers to adjust their approach by acknowledging the fact that farmers have been the primary breeders for million of Years?

Carl Wahl: @Dick happens all the time in cowpeas

Kate Longley: 'Seed' in local markets varies - some is grain, some is 'potential seed', and some is grown specifically by farmers and purchased by traders at a premium as seed. I will post a reference shortly...

Kate Longley: Study on cash transfers for seed security in humanitarian settings - Jules Keane, Dina Brick and Louise Sperling https://pdf.usaid.gov/pdf_docs/PA00WH2D.pdf

Md. Mustafizur Rahman: How can we strengthen partnership with farmers so that we can enhance the seed delivery to the farmers facile?

Dick Tinsley: my earlier reference to genetic pump attempts to look at this and how to maintain the gentic quality of the market seed

Hira Dhar Chudali: Hi everyone, this is Hira Dhar Chudali from Lutheran World Relief - Nepal

Kate Longley: Here's a really good paper on local seed markets: <https://seedssystem.org/wp-content/uploads/2014/03/Local-seed-markets.pdf>

Stephen: Ann - small lot tendering - in the event of procurement - is a good example of how smaller size tendering can benefit local suppliers. Using voucher / cash is the ultimate 'small lot tendering'.

Tessy Madu: Hi everyone, this is Tessy Madu from National Root Crops Research Institute Umudike Nigeria

Neil Miller: Do you have any perspective on vouchers as an alternative to cash?

Daniel Otwani: Here is a paper on the importance of giving farmers opportunity to choose seed and the benefits for breeders <https://ageconsearch.umn.edu/record/263302>

Md. Mustafizur Rahman: Seed producing farmers are not getting their payment for their produced seed timely. How can we mitigate this problem easily?

Kevin Doyle: What is an "informal" seed market? The local trade of seeds at open markets is definitely not an informal market....there are quite structured in the social norms and cultures

Jeremy Davis: Voucher program is very effective to strengthen the linkages with local market actors.

Dick Tinsley: What is the overhead cost of a voucher program?

Stephen: Oversight on my part not to underline the critical role of AG. RESEARCH - ex-ante / ex-post analysis requires engagement with Ag. research (NARS / CGIAR). What particular area? () inventory of farmer preferred varieties / recent introductions (2) variety profiles - for use in communicating to farmers (c) info on seed availability (d) seed quality issues.

Aryemo Sunday Ocaya: Can investing in community seed banks to act as central nodes where farmers can exchange seeds through their own networks or via social events without necessarily using cash be a key source/means for small scale farmers to access good quality local species especially those not covered by commercial plant breeders?? hence contributing to sustainability and contribution to agricultural biodiversity of traditional seeds

Carl Wahl: @Dick Tinsley depends of the voucher type. Mainly they are limited to pre-qualified suppliers (e.g., you can't spend them just anywhere). Also, you kind of have to ensure that they (the selected agrodealers) can handle large number of farmers redeeming their vouchers.

Kevin Doyle: QUESTION: Do Seed System Security Assessments take into account the land tenure security of farmers? If not, do you think it would be an important factor to consider and analyze?

Carl Wahl: In some ways, it's a lot more set-up cost than say, centralized procurement ... most NGOs have long histories / experience with centralized procurements, so doing a decentralized approach requires a whole wave of documentation as to why you are not following procedures.

Praxedis Dube: At times these informal seed systems are very useful, farmers have control over seed and they can be quickly supplied to seed users, which ultimately supports domestic marketing structures, especially in developing countries.

Racey Henderson: QUESTION: Did the USAID statistic on cash for seed include awards for seed fairs?

Dick Tinsley: How easy is it to tell the degree informal seed supplies contain mixed varieties vs. pure variety. For rice it is usually fairly easy to discern variety difference in the seed

Orla Kilcullen: How is this different to the CRS seed fair approach or is this what we are talking about?

Carl Wahl: Can you give some specifics for what you mean by supporting the supply side, particularly for the informal/open market?

Lauren Good: @Dick Tinsley, it also depends on what gets counted in the overhead costs of voucher programs. Often what is reported does not reflect the total cost of the program. This has been the case in both government and NGO driven voucher programs, so I haven't seen sufficient evidence on their overall efficiency rate - what value of overall cost reaches farmers

Rakesh Kumar Shah: Does USAID approve use of local seed varieties through informal sectors? In case seed from informal sector is approved what measures are adopted to ensure the quality of seeds?

Carl Wahl: Typically the farmers incur a higher cost as they have to travel to where the market is ... that creates financial costs, some level of risk (esp. for women), etc.

Dick Tinsley: I just don't like administrative cumbersome programs as overhead costs are usually greatly underestimated and prevent programs from being sustainable and remain donor dependent

John Alosias: Hi, just struggling with my network. Hoping the presenter will be able to share some inevitable concerns when considering exclusive use of modern varieties on informal versus formal markets.

Nazim Ali: In addition to disease and yield, this is problem of mixing different varieties as well.

David Spielman: The evidence on cash transfer programs for social protection is actually quite extensive. Use of similar methods to explore outcomes relevant to seed sector programs would be useful.

Loretta Byrnes: It seemed that in Rwanda farmers got their bean seed from the local food market.. This seed appeared to be a real mixture of varieties. I wondered if farmers preferred the random mix of varieties to mitigate risks related to disease, pests and climate.

Gary Alex: For any program, much is site specific. It would seem though that in many cases there would be virtue in facilitating access to multiple varieties to promote resilience and avoid having "all eggs in a one-variety basket".

Rolf Lienekogel: July 23rd new Calp Cash report is published

Noel Templer: @Loretta that could be true. In Tanzania and also Burundi some farmers would specifically buy potential seed in mixed varieties form. And their reason was to reduce risk of loss

Adam Ahmed: All of the reports mentioned in the webinar will be available for download at the end of the webinar

Praxedis Dube: Timeliness and correct variety for specific areas- important factors to consider when accessing the seeds.

Silvanus Mruma: The problem of disease, yield and mixed varieties could have been minimized if there was a more nuanced approach focusing on farmer saved seeds instead of blanket rejection of these seeds as of inferior quality

Harry Ngoma: The use of vouchers or cash distribution encourages private sector participation and increased likelihood of sustaining seed supply beyond the subsidy program.

Stephen: Hi Loretta - great to see you here. Silvanus - in TZ, can local varieties be sold openly, is it legal?

Carl Wahl: Considering the current Covid-19 pandemic - Any thoughts on increasing farmers own seed supply, community seed banks, etc.? Stephen did mention it was 30% of the farmer seed sources ...

Farhad Hossain: Share some of the interventions that didn't work well.

Kayode Idode: In VCDP, we pioneered a sort of youth-led seed-preneur system in which we linked up with IITA and AfricaRice to train some youth across the project states. These seed-preneurs act as seed producers to the main rice farmers (they also exist in the cassava value chain) and as such sell viable production seeds to the farmers within their geographical areas. This kind of give assurance of availability of quality seeds during planting season as the seeds are also tested and certified by relevant bodies.

Stephen: Carl. Now is opportunity to maybe support some basic training / facilitation on farmer selection, management, storage.

Jean Claude Rubyogo: Farmers also can buy mixed from the market and they will sort the good quality seed to plant and they may use the non seed as food - some farmers plant mixed varieties of beans but increasing due to market, farmers are also planting pure variety (ies)

Loretta Byrnes: Is it still FAO that leads the way determining the need for seed distribution?

Kate Longley: Global Food Security Cluster guidance:
https://fscluster.org/fsc_agriculture_wg/document/guidance-emergency-seed-interventions

Stephen: small lot tendering!

Nazim Ali: In open-pollinated varieties like wheat, private sector companies have a little incentives because of intellectual property rights. Usually these companies don't set up offices deep inside the counties/village. Therefore most of the informal seed sector prevails in these crops. How to formalize and incentivize pvt sector to come forward in this situation?

Stephen: Larger tendering can systematically lock out the locals, even local suppliers. This is a common phenomenon. The last image in my presentation - a GOMA based vegetable seed supplier made this point clearly to me in our discussion last July .

Silvanus Mruma: Stephen. Local varieties are sold on informal markets. They can even be found at traditional urban retail markets. The law does not recognize these type of seed. However, the reality is that these are what most farmers rely on especially in most Self pollinating crops e.g. roots and tubers, traditional coarse grains e.g. millets, legumes etc. It is illegal . However authorities do not enforce if they are sold not as seeds but as grain which farmers purchase and use them as seed

Dick Tinsley: This gets back to the limited financial resources for governments to enforce any regulations

Harry Ngoma: Farmer saved seed can be used in humanitarian crisis as long as basic quality issues like germination is assured. In Zambia, smallholder farmers are protected by use of minimum seed standards which imply that any seed distributed by seed companies , government or NGOs must meet the minimum seed test parameters of germination and purity.

Abdu Beshir: In hybrids seed replacement rate (SRR) is almost 100%. How can we capture SRR in the informal seed sector/local seed system?

Carl Wahl: <http://www.sweetpotatoknowledge.org/wp-content/uploads/2016/02/Richard-Gibson-Delivering-sweetpotato-paper.pdf>

Abu Yarmah: Even though seed aid can pose real risks to farmers if not properly planned, what are the available options in the non-existence of functioning seed systems, especially in a chronic emergency?

Stephen: Thanks for the link Carl.

Stephen: Rachkara, P. (2017). Food Security 9. pp. 595-610

Ann Koontz: Are there any tools that start from farmer/community perspective of what is happening in their seed system and how this knowledge can be more effectively and on a regular basis communicated to government, donors, NGOs? We seem to rely on tools that require analysis and English write-up that need to be done by people with formal education and who not the farmers on the ground.

Dick Tinsley: https://webdoc.agsci.colostate.edu/smallholderagriculture/The_Crop_Genetic_Pump.pdf

Kate Longley: Seed System Security Assessment Tools start from farmer / community perspective:
<https://seedsystem.org/assessments-and-e-learning-course/>

Abdu Beshir: Is there a study/assessment that shows some countries (under the FtF countries) more vulnerability due to COVID-19 than other countries.

Dick Tinsley: but are seed laws enforceable with limited financial resources of governments

Abdu Beshir: *more vulnerable

Hira Dhar Chudali: Often informal seed traders portrayed negatively, but they can be highly innovative in linking seed supply and seed demand across diverse markets, responding to local farmer needs in terms of both variety adaptability and physiological seed quality, and functioning in crisis. I see informal seed markets are a primary source of seed for farmers due to movement restriction, if we formalize the system and train in maintaining the quality can better contribute on ensuring better quality.

Hira Dhar Chudali: and production

Dick Tinsley: It should be noted that in Colorado only 30% of wheat is planted to certified seed and license allow for seasons of planting

Kate Longley: @Abdu Beshir - ISSD has done a series of studies on the impacts of COVID on formal seed systems. I will try to find a weblink...

Papias Binagwa: that will be good Kate

Sultan Mahmud: hi ...its Dr Mamud Sultan ... from Bangladesh ...its really great listen this talk....

Nazim Ali: We, here in Pakistan, established seed villages to promote improved varieties where farmers were trained to produce high quality seed and exchange it for old varieties grains. It worked well, now farmers are seed producers and sharing with neighbouring villages. Now it is replacing old varieties.

Silvanus Mruma: Dick Tinsley. Enforcement is difficult with limited Govt resources. Agreed. I believe the solution is to establish grassroots association of local seed producer and strengthen their capacity for basic quality control in collaboration with local governments

Angela Ndereyerio: Nazim that is interesting

Jules Keane: Thank you to all for attending!

Sultan Mahmud: Here in Bangladesh majority of seeds specially rice seeds comes from informal

Kate Longley: Here are the ISSD seed alerts: <https://issdafrica.org/2020/05/23/covid-19-seed-alerts/>

Holli Jordan: Thank you to the presenters for this rich discussion. I am curious why we are not talking more about the specific role of the community-based farmer organization in leading seed responses to humanitarian crises, including through their management of community-based, safety-net seed banks from their farmer members.

Adam Ahmed: Thanks for joining us today!!!

Abdu Beshir: @Nazim Ali: glad to know this progress in Pakistan.

Jean Markendy CHARLES: Thank you !!!

Noel Templer: Thanks everyone!

Kate Longley: Thanks for everyone's inputs!

Jean Claude Rubyogo: thanks

Dick Tinsley: thank you for a good webinar

Carl Wahl: Thanks!

Jean Claude Rubyogo: highly appreciated

Benoit Joseph Batiemo: thank JC

Alan Grundy: Thanks!

Aryemo Sunday Ocaya: thanks

David Resetar: Thank you hh hhhh

Julie Mayans: thank you!

David Resetar: oh my

Angela Ndereyerio: Asante sana

Tessy Madu: thanks everyone

Paul Gamba: Thank you

Sheila Halder: thank you, gave some great overviews of learning

Zia Ahmed: thanks, also kindly share the email contacts of the participants

Dr. Derian ECHEVERRI-MOLINA (Ph.D.): Thank you all. Regards, Derian

KASHEMWA Arsene: Thank you

Tessy Madu: Bye Steve.

Hamdino Ahmed: Thank you

Nazim Ali: Where is the transcript of the webinar?

Elamien Mohamed: Thank you

Connie Formson: Thank you!

Daniel Otwani: thank you

Silvanus Mruma: Great!

Marilyn Balderas: thank you

Emmanuel Kwabo: Emmanuel: Thank you