

OPERATING MODELS FOR EARLY GENERATION SEED PRODUCTION: 10 CASE STUDIES

Presentation Chat Transcript June 24, 2020

PRESENTERS

Mark Huisenga, USAID Bureau for Resilience and Food Security

Lauren Good, Bill & Melinda Gates Foundation

Jason Nickerson, Context Global Development

Amsale Megistu, Bill & Melinda Gates Foundation

Mark Tokula, Umudike Seeds

Mohammad Khaleguzzaman, Bangladesh Rice Research Institute

MODERATOR

Jennifer Leopold, USAID Knowledge, Data, Learning and Training Program

Stephen Walsh: Greetings, are we on? Jennifer Leopold: Hi Stephen, we'll be starting in aboaut 30 minutes. Dr. Derian ECHEVERRI-MOLINA (Ph.D.): Hello/Hola, Dr. Derian ECHEVERRI-MOLINA (Ph.D.), Colombian living in South Africa Adam Ahmed - Agrilinks: Hi Everyone, Please fill out the polls and let us know where you are joining from today in the chat pod Dick Tinsley: dick tinsley still in Virgina Lusike Wasilwa: Lusike Wasilwa from Kenya Agricultural & Livestock Research Organization Jennifer Leopold: Hello Dick! Jennifer Leopold: Hello Lusike! Hippolyte Affognon: Hello everyone, greetings from CORAF in West Africa Jennifer Leopold: Hi Hippolyte! Hippolyte Affognon: Hi Jennifer, I hope that you are doing fine. Stay safe!

Jennifer Leopold: You too!

Hamdino Ahmed: Greetings from Egypt Jennifer Leopold: Hello Hamdino! Welcome! Amsale Mengistu: Luren, Are you online? Eric Tegei: Greetings from Kenya Aashif Iqubal Khan: Hello, from Nepal Jennifer Leopold: Hello Eric. Hello Aashif! Welcome! Holiance Odhiambo: Hi, Holiance from Kenya Jennifer Leopold: Hi Everyone, Please fill out the polls and let us know where you are joining from today in the chat pod Zia Ahmed: Hi this Zia Ahmed from Bangladesh but now stuck in Vienna, VA Rebbie Harawa: Hello Everyone. Rebbie Harawa, ICRISAT joining from Nairobi, Kenya Noel Templer: Hi Colleagues. Noel Templer from Nairobi, Kenya! Steve van der Merwe: Hi, everyone... greetings from Switzerland

Jennifer Leopold: Thanks for your patience. We'll be starting the webinar in just a few minutes.

Emilia Umana: Hello everyone from Costa Rica!

Daniel Otwani: Hallo everyone, Daniel Otwani joining from Perth Western Australia

Chinedu Agbara: Agbara Chinedu from Lagos Nigeria

aarti mahajan: Hello everyone. Aarti from MEDA, uganda

Papias Binagwa: Greetings from Tanzania!

Nathalie Vignaux: hello all, Nathalie from SFSA in Swityerland

Garold LaRue 2: Fort Worth, Texas

Amsale Mengistu: Amsale Mengistu, from BMGF/Ethiopia Office

Mohammad Islam: Hello, Mohammad Rafiqul Islam from IRRI Bangladesh

Edo Lin: Hi This is Edo Lin joining from Cambodia.

Zia Ahmed: @Dr. Khalequzzaman Hello!

Joyce Maling a: Hi. Joyce Maling'a from Kitale, Kenya

Steve van der Merwe: Hi Jennifer... are we suppose to hear something... I see people talking but no sound on my side Peter Hanson: Greetings to all. I am Peter Hanson from the World Vegetable Center listening from Minnesota, USA Lauren Good: I'm seeing lots of friendly and familiar names pop up on the attendee list. Great to have you all joining today! Richard Egan: Hello! Will this be recorded? Dr. Khalequzzaman: Zia: How are you Adam Ahmed - Agrilinks: Yes this will be recorded Stephanie Gakuo: Hello, Stephanie Gakuo, CABI Nairobi Yacouba Diallo: hi, Yacouba from CORAF David Spielman: David Spielman, IFPRI, Washington, DC Roland Brouwer: Hello Krista Isaacs: Greetings. Krista Isaacs from Michigan State University Noshad Ali: good not working

Chinedu Agbara: Hi Lauren nice to see you are here. Chinedu, Sahel Consulting JANE ININDA: Jane Ininda AGRA-keen to interact Noshad Ali: voice not working Gelsey Bennett: Good morning. Gelsey Bennett, Digital Green, Washington DC. Temi Adegoroye: Hello all, this is Temi from Sahel Consulting in Nigeria. Great to be here Noshad Ali: is that started Pieter Rutsaert: Pieter Rutsaert, cimmytNairobi Jennifer Leopold: Hello, everyone. Glad to see you all here! We'll be getting started in a few minutes Loretta Byrnes: Greetings, Loretta Byrnes from Germany Mohammed Zainul Abedin: gOOD mORNING Matthias Plewa: greetings from Germany Mohammed Zainul Abedin: Good Morning Krisztina Tihanyi: Hello, Everyone. Krisztina Tihanyi from The African Seed Access Index (TASAI).

Daniel Karanja: Hello from CABI

Boudy van Schagen: Hello all, Boudy van Schagen from the Royal Tropical Institute (KIT) in the Netherlands.

Mohammad Shibly: Hi Good morning, this is Shibly from USAID Bangladesh

John Raphael Artates: Good evening from the Philippines

Hippolyte Affognon: Hi Krista, here is Hippolyte. How are you? Stay safe!

julie march: Good Morning. Julie March USAID

Krisztina Tihanyi: Hello, Hippolyte - nice to see you! Hope you're also staying safe.

Krista Isaacs: Hi Hippolyte! Nice to see you!

Sandra Alai: Sandra Alai - Qualibasic Seed; hello everyone

Muhammad Amir Magbool: Hello from CIMMYT-Pakistan

Sofia Tesfazion: Hello everyone, i am Munya Jonga from AATF, Nairobi, Kenya

Mohammed Zainul Abedin: I am fpormer IRRI Representative in Bangladesh. Now joining you from Canada

Sarah Huber: Hello, this is Sarah from Flour Mills of Nigeria Neil Miller: Neil Rowe Milller, Tearfund East Africa Pranata Barua: Good morning from Ottawa, Canada Holly Sobetski: Hi Neil! Holly Sobetski from ECHO, North Fort Myers, FL Tim Johnson: Hi I'm with Illinois Foundation Seeds Inc. and Board memeber of QBS Kenya. Abu Yarmah: Abu Yarmah, from Food for the Hungry, Washington DC Hippolyte Affognon: Hi Krisztina, I am doing fine, nice to see you! Jonny Casey: don't know if it's just me, but the audio is very very broken...? Sam McNeill: Greetings from the University of Kentucky Biosystems & Agricultural Engineering Dept. Charles Davis: audio very broken aarti mahajan: audio is broken Nora Lapitan: sound is bad

Mohammad Islam: Choppy audio
aarti mahajan: sound is bad
Sandra Alai: Audio breaking
Abu Yarmah: Coming in broken
Nora Lapitan: breaking up too much
Emilia Umana: yes! my audio as well comes in broken
Isaiah Lwalinda: Hi Ladies and Gentlemen, Lwalinda Isaiah, Regional Manager at Community Resource Development Initiative (CRDI).
Aashif Iqubal Khan 2: beaking sound
Chris Ojiewo: I thought it is from my end only
Tracy Powell: Mark's sound quality is much improved.
aarti mahajan: Its better now
Noel Templer: Hi Krista. Nice to see you in here!
CLEMEN GEHLHAR: Good morning from USDA/FAS/GP/Agricultural Economic Development Division

Dr. Khalequzzaman: Good evening Mobarak Hossain: Hi am Dr. Mobarak Hossain. Scientists of IRRI from Bangladesh Krista Isaacs: Hi Noel - nice to see you too! Pranata Barua: sound is broken/distorted Yacouba Diallo: no sound Hippolyte Affognon: Hi Chris! Steve van der Merwe: Audio is un-hearable... cannot make out what presenters are saying Patrick. Hanemann: Patrick Hanemann from Farm2Market Agribusiness Consulting, Texas Hari Kumar Shrestha: no sound Oluwatosin Oni: Good day. I am Oluwatosin Oni from Catholic Relief Services Nigeria Isaiah Lwalinda: Hi Ladies and Gentlemen, Lwalinda Isaiah, Regional Manager at Community Resource Development Initiative (CRDI). Kampala- Uganda

Regina Eddy 3: Mark's sound is coming in clear for me.

Hippolyte Affognon: We can not hear the presenter. Noshad Ali: founder of Greenify Agriculture from Pakistan CLEMEN GEHLHAR: I'm based in Washington, D.C. Jennifer Leopold: Hello Isaiah. Welcome! Hippolyte Affognon: sound is broken and it is distorted Chris Ojiewo: Mark is clearer now from my end Evelyn Ezeagu: Hi everyone, I am Ifeyinwa from Phelyn Skill Center, Nigeria Dr. Khalequzzaman: can not hear Chris Ojiewo: The volume is pretty low though Sandra Alai: Lauren, we cant hear you Celestina Jochua: Hi, I am Celestina Jochua from Mozambique, Africa Md Ashraf Ali: volume is not clear please

Jennifer Leopold: Apologies on issues with audio. We are trying to troubleshoot.

David Karanja: kindly get closer to mike
Noshad Ali: voice is very low
Hari Kumar Shrestha: I am from CIMMYT Nepal
Noshad Ali: audio issue
Ajay Panchbhai: Volume is very low.
Md Ashraf Ali: please get closer to phone
MARTIN NDOMONDO: Good evening from Tanzania
Adam Ahmed - Agrilinks: His audio is low, so I advise users to turn up volume on their device
Steve van der Merwe: Lauren & presenters we cannot hear you
Donald Mavindidze: May be you can also follow the subtitles
Aashif Iqubal Khan 2: No sound
Hari Kumar Shrestha: Not hearing your voice.

JANE ININDA: Can't hear as well

Roland Brouwer: Crops may be privately produced but planting material may be kind of public as it is

shared through social security and risk mitigation mechanisms

Dr. Khalequzzaman: Really no sound since started

Stephen Walsh: Case studies are great but unfortunately the "context" of these cases is not all

representative of countries where EGS are most problematic..

Happy Sikalengo: Hello from Tanzania

Aashif Iqubal Khan 2: Not hearing any thig

Bellah Mpofu: Bellah Mpofu: Hi All. I am with the Feed the Future Southern Africa Seed Trade Project

based in Lusaka, Zambia

Hari Kumar Shrestha: his sound is good.

Issah Abdul Rashid: Hello from Ghana

Muhammad Ashraful Habib: Hi, this is Muhammad Ashraful Habib from IRRI Bangladesh

Donald Mayindidze: Sound is bad

Loretta Byrnes: Are the detailed case studies available?

Md Ashraf Ali: Yes case studies available in links Essegbemon Akpo: Great talk Lauren Donald Mavindidze: I think the convener should mute cause getting feedback Md Ashraf Ali: backword noise repeating please Paul Wagstaff: Paul Wagstaff, SHA Ireland Mark Nelson: Yes. Case studies are available on Agrilinks. See https://www.agrilinks.org/post/casestudies-early-generation-seed-systems-project-overview-0 Emilia Umana: In perennial crops like coffee it takes even more time Roland Brouwer: Farmer awareness and endorsement requires that they are involved in the variety development and selection process Hellen Opie: Hellen Opie; NARO- Uganda Holly Sobetski: Where is the file downloads box to download the slides?

Lauren Good: Stephen W. - the point of the studies was to see what the common elements between different models that were common and required for success. And some of them started when they were similarly immature and evolved over time. That was the story that we attempted to capture - not a snapshot of where they are, but what that journey was

Stephen Walsh: Well noted Lauren. When the 'investments' start into the EGS the contexts will drive the investment.

Hari Kumar Shrestha: When do you start to produce early generation seed? Is it before release/registeration of varieties or after it also?

Donald Mavindidze: Depends on how you percieve your pipeline product. If you think its going to be a blockbuster then you start early. If its going to be a me too. then there might be no neeed

Donald Mavindidze: There are also a lot of other factors that you should consider , such as where the new product will fit in your portifolio

Hari Kumar Shrestha: If it is pipeline product, how could you classify seed as breeder, foundation seed?

Mark Huisenga: Regulators in many countries will determine when a new release can by multiplied in bulk. Earlier bulking is generally recommended,

Edo Lin: Public sector research is too often donor driven (including BMGF!) but does not take into account the demands of the industry.

Roland Brouwer: So the rice seed is reaching few farmers. What does that mean for the rest of the farmers?

Donald Mavindidze: Early on in t]its development you may need to talke some risk to start producing prebasic seed depending on how you see the "new" product's contribution in your portoi

Mark Huisenga: Farmers continue to use old varieties.

Stephen Walsh: Lookinf forwatd to the video of this webinar - great initiative form the cases and

webinar. Thanks to all for your efforts on this critically important effort.

Mohammad Islam: If the product is superior and develop accoding to Product profile based, then it

should workd EGS.

Edo Lin: Who is responsible to use FS? here in Cambodia FS production is the sole responsability of the

public sector which does not have the capacity.

Shida Nestory: How can breeder seed production contracted to private sector?

Roland Brouwer: @Markk, this means that the ESG only serves a small portion. How to expansd?

Mohammad Islam: There should also very good seed system establishment including Public and Private

partners, then it will be effective.

Mark Huisenga: Depends on the country regulatory framework. In some countries FS production is

reserved for government. We've fund these arrangements to be very disadvantageous.

Roland Brouwer: Disadvantageous in what sense?

Mark Huisenga: We've found high prices, low quality, and other issues associated with gov FS

production.

Roland Brouwer: Ok

Chris Ojiewo: @Shida Nestory, inovative lisensing arrangements are possible, depending on the capacity

of the private sector to do maintenance breeding

Hari Kumar Shrestha: In Nepal, BS is produced by the breeding centre (variety developer), where as FS i
produced by Nepal Agri. Research Council and the provate sectors.

Edo Lin: I agree Mark!

Loretta Byrnes: When government agencies have control over FS they also tend to compete with the private sector

Bellah Mpofu: In some cases both the quality and quantity is inadequate.

Greg Traxler: Can the slides be shown full screen?

David Spielman: Checkoff dollars? Is that similar to an end-point royalty system or levy on commodity producers?

Edo Lin: FS production should be a private sector option.

Neil Miller: full screen of slides would be very helpful...

Adam Ahmed - Agrilinks: Greg, you can expand the slides on your browser by using the diverging arrows icon

David Spielman: Or are those examples of checkoff systems?

Loretta Byrnes: Or at least government agencies that produce FS should not be producing and selling Commercial seed

Neil Miller: There is no option for full screen of the slides. Only the caption streem and video

JANE ININDA: Policy issues in countries restrict liberalisation of breeder seed production-

Loretta Byrnes: Shouldn't breeder seed be under the control of the breeder?

Dr. Md. Salim Ullah Khan Eusufzai: Dr. Md. Salim Ullah Khan Eusufzai, IUBAT, Bangladesh. Hi. All

Hari Kumar Shrestha: In Nepal, we have two system of seed quality control, i.e., seed certification system (BS-FS-certified seed-improved seed) and truthful label system (BS-source seed-label seed-improved seed). Do you also have this system?

Happy Sikalengo: Hello,

Chris Ojiewo: @Jane Ininda, that's true for many countries for publicly bred varieties. However, there should be a possibility for negotiations on this through harmonization processes. In most WCA countries, varieties release in one country enter into ECOWAS catalogue and I believe this should improve access as compared to cases where varieties are limited to releasing countries

Mark Huisenga: The ECOWAS system would be even more effective if it was brought up to date and made digitally available to interested parties.

Hari Kumar Shrestha: I kindly request the organizer to provide soft copy of presentation. Sometimes, it is not listened clearly.

Chris Ojiewo: @Loretta Byrnes, someone has to take responsibility for maintenance breeding. Therefore, breeder seed should either be handled by the breeder or lisensed to an institution with technical capacity for maintenance breeding. My opinion

Roland Brouwer: Very interesting, Thanks Edo Lin: Thanks Jason, nail on the head! Folarin Okelola: well delivered Jason Loretta Byrnes: Chris, that makes sense to me. Ekanath Khatiwada: is it possible to get this PPT? Mohammad Islam: Good evening from Bangladesh Chris Ojiewo: @Mark Huisenga, we initiated a discussion with CORAF to use the Digital Seed Catalogue that many of our partners are using at both public and private sectorinstitutions in both WCA and ESA Happy Sikalengo: Hello, We are a startup seed company in Tanzania. We want to register our own seeds. We'd love to partner with any organisations that produce basic seeds mainly maize. Our contacts: info@rieta.co.tz rieta.agrosciences@gmail.com Mohammad Islam: Background noise?? Folarin Okelola: Chris Ojiewo: @Mark Huisenga, we initiated a discussion with CORAF to use the Digital Seed Catalogue that many of our partners are using at both public and private sectorinstitutions in both

WCA and ESA - This is the right way to take our seed system in WCA forward

Happy Sikalengo: Hello, We are a startup seed company in Tanzania. We want to register our own seeds.

We'd love to partner with any organisations that produce basic seeds mainly maize. Our contacts:

info@rieta.co.tz rieta.agrosciences@gmail.com

Mohammad Islam: choppy audio

Neil Miller: Happy, too bad you don't want to focus on species other than maize. That's where the big

need is.

Mohammad Islam: Dr. Zaman, please move slowly...

Neil Miller: For example, we have developed excellent lablab varieties for Tanzania. Looking for seed

producers and sellers.

Happy Sikalengo: @Neil we are also in soybean, beans and sorghum.

Mobarak Hossain: Dr. Saman could you please move slowly?

Mohammed Zainul Abedin: National Seed Policy in bangladesh and establsihment of Seed Network in

Bangladesh for rice crop faciltated enhancing EGS in bangladesh

Happy Sikalengo: @Neil please your email address

Aashif Iqubal Khan 2: breaking sound

Neil Miller: Neil.Rowe-Miller@Tearfund.org

Mohammed Zainul Abedin: But production of enough of Breeders seed is still a constraint

Chris Ojiewo: @Neil Miller, Maize is where the private sector get easy money, especially hybrid maize. I

would guess we probably have less issues with hybrid maize EGS than other crops. The profit incentives

makes maize seed systems a little more sel-driving, but also the most easily challenges with "fake seed'.

Edo Lin: Rice farmers all over Asia are abandoning transpalnting due to labour shortages. In Cambodia

thet are using up to 400 kg per hectare which does not incentivice them to use certified seed!

Neil Miller: Happy, where are you getting your basic seed for beans?

Edo Lin: Direct, mechanical seeding uses between 40 and 120 kg.

Lauren Good: Happy - you have a good resource in QualiBasic Seed that can provide you with

Foundation seed. https://qualibasicseed.com/

Happy Sikalengo: Neil, currently we buy basic seeds from TARI

Mohammad Islam: Dr. Zaman, do you think the breeder seed produced by Public organization is enough

to produce quality commercial seeds?

Neil Miller: Sawa

Sandra Alai: Happy I have sent you an email already

Neil Miller: Tari Seliani?

Happy Sikalengo: Karibu sana Neil.

Sofia Tesfazion 2: Our contacts: info@rieta.co.tz rieta.agrosciences@gmail.com I have taken your

details. and will follow up AATF

Happy Sikalengo: Thank you Sandra. I have seen your email.

Happy Sikalengo: TARI Uyole

Dr. Md. Salim Ullah Khan Eusufzai: Audio skipping creat problem to understand

Mohammed Zainul Abedin: In bangladesh, there are different EGS for hybrid and OP varieties of rice.

Chris Ojiewo: @Happy and @Neil, for publicly bred maize OPVs in Tanzania, besides Foundation seed supply by ASA, I understand that Private seed companies are allowed by law to produce their own foundation seed. The challenge is probably quantitities of breeder seed. The new TARI Seed company may probably help with coordination of the process of production and supply of breeder seed.

Happy Sikalengo: Sofia, will be waiting your email.

Mohammad Islam: The FS should be produced by Private sector

Ekanath Khatiwada: Generally, there is a huge gap on the FS seed/RS seed supply and CS seed demand , especially on rice sector . In addition BS/FS/RS seed production is mostly controlled by the public sector. how could be a better solution to balance this gap?

Mohammad Islam: Dr. Zaman, your audio is off?

Mark Huisenga: A better solution involves better demand forecasting. Mohammad Islam: We can't hear you Ajay Panchbhai: Hi, this is Ajay from IRRI. On the question re IRRI working with the private sector, yes, we do work extensively with the private sector in Bangladesh. Md Ashraf Ali: ok Adam Ahmed - Agrilinks: Apologies for the audio issues everyone. Hari Kumar Shrestha: yes, there is sound system problem. Chris Ojiewo: @Happy, TARI Uyole for Southern Region, TARI Selian for Northern Region and TARI Maruku for Lake and Western Region will get you all the breeder seed of beans. Coordination is with TARI Uyole. Mohammed Zainul Abedin: Dr Zaman, pl talk about the Seed net Md Ashraf Ali: @Shrestha sir, how are you? Mark Huisenga: Seed companies should be prepared to pre-purcahse foundation seeds, if not 100% pre-

purchase maybe a lower percentafe. Without any financial commitment by seed companies upstream EGS production is risky.

Ekanath Khatiwada: Thank you @Mark Huisenga, we are also developing a demand forcasting system as well.

Mohammad Islam: Bangladesh Seed Network working nicely

George Osure: George Osure: pre-purchasing Foundation seed will open up the system to other investment by seed companies such as thinking about their distribution network in a pro-active manner. I agree Mark

Mobarak Hossain: Dr. Zaman is it enough that public institutions providing BS in Bangladesh?

Sandra Alai: Mark Hussienga, very true about the pre purchase of foundation seed and demand forecasting

MARTIN NDOMONDO: Hi Ajay! I thought the question was going to BRRI.

Dr. Khalequzzaman: Mobarak: yes, if you consider seed ration then youwould find your answer

Ajay Panchbhai: Yes, indeed it was to BRRI. Realised that after I responded

Michael Dockrey: @Ekanath Khatiwada what are the components of your demand forecasting model you're developing? Thank you!

Chris Ojiewo: @Mark Huisenga, I agree but I agree more with demand forecast. certified seed demand is derived from grain demand which depends on the end use of the grain (processing, export, subsistence, local trade etc). Foundation seed demand is derived from certified seed demand and breeder seed demand is derived from foundation seed demand. Unfortunately, the reality is that it takes at least a season to respond to one class/level of that demand. Seed companies can only be sure to purchase all the foundation seed if they are sure that they will not overproduce certified seed. and the chain goes on and on, requiring very good mapping of these demand corridors

Mohammad Islam: Dr Mobarak, there is some ruleas and regulation from BD govt to production of BS, the owner of the variety should be produced BS, other can't but it could be changed for bigger interest

David Karanja: The models under discussion are very interesting and very useful for crop varieties that farmers are aware of. For new varieties recently released, the breeder seed production need to be accompanied by promotional activities so that demand can be created especially in East Africa where

certified is mostly demanded for cereals especially maize and horticultural crops

Mobarak Hossain: Thanks Drs. Zaman & Islam

Muhammad Ashraful Habib: Resgarding the BS production, Is quality will be same if it could be changed

Abdu Beshir: These days we have digital innovations for EGS demand and supply forecasts. One

example is Nepal.

Mohammed Zainul Abedin: We cannot hear him

Anamika Sharma: we can not hear

Iain Morrell: yes

Dr. Md. Salim Ullah Khan Eusufzai: We cannot hear

Muhammad Ashraful Habib: If we strengthen the public sector for BS production and get easy access of

FS for public, private and even NGO who have small seed bussiness that can be very effetive

Mohammad Islam: please on your mic

Mohammed Zainul Abedin: There is iandequate capacity in production of Breeders seed as well in

Bangladesh

Ekanath Khatiwada: @Michael Dockrey, We have designed EGS forecasting APP, the systems include both RS and seed demand and supply interactive platform, where seed growers, millers seed companies most interact, at the same time local Department of agriculture uses this application to collect the RS seed demand and allocate RS seed to the seed producers/seed companies.

Chris Ojiewo: What is the experience in terms of 1. Foundation Seed Company specializing in Foundation Seed only 2. Commercial Seed Company producing its own Foundation seed say under lisence from the breeder 3. Public Institutions supplying foundation seed. How do these differe in terms of quality, quantity, timeliness etc

Dr. Khalequzzaman: Zainul sir: that partly true, specially manpower

David Spielman: Thanks Jason.

Mohammed Zainul Abedin: Yes. Dr zaman. I agree

Mohammad Islam: Dr. Zaman, why not BD govt control or stop to sale FS at dealer level? what is the real problem?

ATINGI ANDREW JULIUS: Where do we stand in all the EGS seed production chain in regards to GMO seed?

Greg Traxler: What have the donors learned about their role in supporting seed systems?

Chris Ojiewo: What is the experience in terms of 1. Foundation Seed Company specializing in Foundation Seed only 2. Commercial Seed Company producing its own Foundation seed say under lisence from the breeder 3. Public Institutions supplying foundation seed. How do these differe in terms of quality, quantity, timeliness etc??

Md Ashraf Ali: Private co are unable to control for saling the seeds during season. that's why its beyond control.

Dr. Khalequzzaman: We are trying to stop FS selling

Michael Dockrey: @Ekanath Khatiwada. Thank you. Can you apply your demand forecasting system to estimate improved seed adoption rates among end-users (SHF's)?

Ekanath Khatiwada: @Michael Dockrey, yes it dose

Chris Ojiewo: Thanks to the two Marks

Hari Kumar Shrestha: In supplimentary to Eknath Khatiwada, I would like to add some more information about digitally enabled seed system (DESIS) in Nepa as memtioned by Dr. Abdu before. Seed Quality Control Centre (SQCC) of the Ministry of Agriculture, Nepal has developed this system to collect deman for seed, and produce and sypply seed. It is very useful tool.

aarti mahajan: What's the key challenge in adoption and commecialisation of new varieties and any interesting examples from these case studies addressing these challenges?

Emilia Umana: We have been having trouble introducing new coffee hybrids to growers, most are afraid of them. Do you have any recomendations to make this adoption process easier?

Nora Lapitan: thanks to all the speakers. Great webinar.

Zia Ahmed: @Jennifer Leopold kindly share the email contacts of the participants.

MARTIN NDOMONDO: How can we efficiently introduce deed demand estimation tools in East Africa Region given the prevailing challenges?

lain Morrell: thank you everybody, good discussion

Walter de Boef: thanks to see the great progress with understanding diversity in EGS seed systes

Nora Lapitan: thanks to all the speakers. Great webinar.

Zia Ahmed: @Jennifer Leopold kindly share the email contacts of the participants .

MARTIN NDOMONDO: How can we efficiently introduce deed demand estimation tools in East Africa Region given the prevailing challenges?

lain Morrell: thank you everybody, good discussion

Walter de Boef: thanks to see the great progress with understanding diversity in EGS seed systes

Noubia Gribi: thank you for your great info and presentations

Mark Huisenga: Farmer awareness is most often advanced by learning from other farmers. This has been the most effective means of encouraging adoption. Mass media are becoming more effective, the miuch can still be done in this area.

Mark Nelson: Re: Emilia - please reference the Idaho Potatoes EGS Case Study. This case provide good examples of incorporating offtakers in to trialing and demonstration with growers to provide market assurances for new varieties

Isaiah Lwalinda: Thanks for organizing and taking us through this wonderful webinar

Noubia Gribi: I look forward to July 1st Mobarak Hossain: Thanks for the nice webinar Hari Kumar Shrestha: Thanks a lot for the organizer and all the participants. It was good program. Abdu Beshir: @Mark Huisenga thanks for the good insights! MARTIN NDOMONDO: Thanks, It was great webinar I 've attended. Emilia Umana: Thank you Mark! Will do! Md Ashraf Ali: Thanks Papias Binagwa: Thanks for the knowledge Bellah Mpofu: Thanks. Great presentations and discussion Oluwatosin Oni: Thank youorganisers, presenters and the panelists.

Tim Johnson: very good webinar. thank you!

Chris Ojiewo: Thank you all

Saidul Islam: Thanks Freda Owusu: Thank you all Noel Templer: Excellent discussions! Mourad Mtibaa: THANK YOU FOR THIS EXCELLENT WEBINAR Olusegun Osundiya: Thank you for this great, educative session Lauren Good: Another reminder that all of the full case studies are available on the Agrilinks site https://www.agrilinks.org/post/case-studies-early-generation-seed-systems-project-overview-0 Greg Traxler: Well done presenters and participants! Celestina Jochua: Thank you Connie Formson: Thank you! Folarin Okelola: Great interaction and well presented. Adam Ahmed - Agrilinks: Please join our next Agrilinks webinar on July 1 https://www.agrilinks.org/events/market-led-interventions-seed-security-response Muhammad Ashraful Habib: Thank you all

Hellen Opie: Thank you All