



HELPING SMALLHOLDERS MAKE THE MOST OF MAIZE THROUGH LOANS AND STORAGE TECHNOLOGY: EVIDENCE FROM TANZANIA

CHAT TRANSCRIPT

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USAID Agrilinks: Greetings everyone, and welcome to our webinar. We will begin in half an hour. You can type your questions or concerns here in this chat pod.

Bekele Hundie Kotu: I can't connect

Zanau Hassan: Zanau from Nigeria

Zanau Hassan: Hope I am still within the timing?

Adam Ahmed - USAID Agrilinks: Yes, Zanau, we will get started in about 20 minutes!

April Thompson - Agrilinks: Hi Bekele, there is no audio yet so if you mean you do not have an audio connection it is because it hasn't started yet.

Katie Biese: Hello, Dinardo here subbing in from Katie at the MicroInsurance Centre at Milliman.

Katie Biese: I can hear you

Marvin Muhumuza: yes I hear u

Laura McHugh: Sounds good. Thanks!

Farhat Kunmi-Olayiwola: Sound clear

Richard Meyer: can hear audio.

Adam Ahmed - USAID Agrilinks: Wonderful, thank you all. Glad you could join us today!

Bekele Hundie Kotu: Thank you. I am waiting.

Sergio Ferreira: Hi everyone, good morning

April Thompson - Agrilinks: Good morning, Sergio! Where are you dialing in from?

April Thompson - Agrilinks: Everyone, feel free to introduce yourself here while we're waiting to get started.

Sergio Ferreira: Hi, I am from Brazil

April Thompson - Agrilinks: Bemvindo!

Sergio Ferreira: Thank you

Femi Gisanrin 2: Hello Everyone

Godswill Egbe: Hello everyone

islamiyat ibikunle: Hello Everyone

Azan Virji 2: Hey everyone! Joining in from Tanzania!!

Shamim Zakaria: Hello everyone, Shamim from Tanzania

April Thompson - Agrilinks: Wonderful! look forward to hearing from you all today - we welcome questions and comments from our remote audience. Is anyone here working in maize programming?

Nina Getachew: Hi April, everyone - joining from FHI 360's DC office, I am with the mstar team and looking forward to the presentation/discussions

Humayun Dar: Hello everyone! Humayun from Pakistan

Lena Heron: Hi all. Lena Heron joining from Singapore

Dick Tinsley: Good morning, Dick Tinsley from a very fridged Colorado

April Thompson - Agrilinks: Hi Dick! Welcome from an unseasonably warm DC.

Jeannette Tramhel: Jeannette Tramhel, Organization of American States (working on W/R legislation)

April Thompson - Agrilinks: Wonderful, Jeannette! Welcome!

Britta Deutsch: Hi everyone, I'm joining for the Hanns R. Neumann Stiftung and we implement a coffee & maize program in Tanzania. Storage is a major issue so I'm looking forward to the presentation.

Raymond Anthony: Hello everyone, Raymond from Tanzania

Frederic De Coster: Hello everyone, Frederic De Coster from myAgro Tanzania

Adam Ahmed - USAID Agrilinks: Britta, Raymond and Frederic. Welcome!

Adam Ahmed - USAID Agrilinks: Glad that everyone could join us today. We will be starting in a few minutes.

Adam Ahmed - USAID Agrilinks: We are just waiting on our live audience to get situated.

Beatrice Pierre: hi, I am Beatrice, attending from USAID-Haiti. The situation from Tanzania is a lot similar with Haiti in terms of post harvest loss and price difference from harvest to planting seasons

Beatrice Pierre: i am looking forward to seeing the magical means used to overcome these challenges

Adam Ahmed - USAID Agrilinks: Hi Beatrice, so glad you could join us today!

Vanessa Adams: Hi. I'm Tracy with DAI in DC.

Victoria Becker: Good morning, Victoria from ICCO Cooperation base in DC

Leah Hoffman: Good morning, Leah from Baltimore

Adam Ahmed - USAID Agrilinks: Hi Vanessa and Victoria. Glad to have you with us today.

Ganesh Bora: Hello everyone, this is Ganesh Bora from Mississippi State (Precision AG)

Diana McLean: Good morning all. Diana from the Cornucopia Group, Canada

April Thompson - Agrilinks: Beatrice, bienvenue! look forward to hearing your reaction to the presentation today and if you think the solutions presented will be workable in Haiti.

April Thompson - Agrilinks: Hello, Ganesh, Diana, Leah!

Adam Ahmed - USAID Agrilinks: Just a reminder to all of our online audience, you can type your questions for the speakers in this chat pod during the presentation. They will be answered during our Q&A session

April Thompson - Agrilinks: We're about to get underway in just a moment.

Bernard CARTELLA: Hi everybody, Bernard technical Advisor FSL, Save the Children Regional office Western central Afric

Richard Meyer: Lena: Are you aware of our credit-linked insurance papaer? If not, send me a mail at meyer.19@osu.edu Dick

Lena Heron: Hi Dick! Yes, I saw the paper. Brilliant!

Lena Heron: MarketLinks--great name!

April Thompson - Agrilinks: Thanks, Lena!

Dick Tinsley: but will marketlinks limit the topics too much

April Thompson - Agrilinks: Hopefully everyone is on both the Agrilinks and Microlinks websites - let us know if not and we can add you.

Deborah Babalola: Hi, everyone

April Thompson - Agrilinks: Dick, actually the content will be largely the same but wanted to align the name better to the content - which goes way beyond microenterprise.

Deborah Babalola: Joining from Nigeria

April Thompson - Agrilinks: Welcome Deborah!

Dick Tinsley: but a broader approach might allow cover more topics that occassional get addressed

Dick Tinsley: I am not certain the marketing is the most critical need for smallholders, more critical is operational limits

María Isabel Cartagena: Greetings from Ecuador!

April Thompson - Agrilinks: This isn't about marketing.

April Thompson - Agrilinks: Greetings, Maria!

Richard Meyer: Lena, thanks. Know of good related sources? Hope you are well.

Lena Heron: Dick, I'll email you. Let's connect.

Amanda Davey: please be mindful of the microphone.

christine westercamp: Hi to all!

April Thompson - Agrilinks: Hello, Christine!

Dick Tinsley: How often are the loan payback in kind rather than cash, and that does not change over the year

Doudou Ndiaye: Agriculture Specialist, Sahel Regional Office, USAID/Senegal

April Thompson - Agrilinks: Salut Doudou!

Deborah Babalola: I agree that the principal constraint is the "sell low , buy high" phenomenom which is widespread in SSA and is not limited to maize alone.

April Thompson - Agrilinks: The insects are winning!

Ganesh Bora: Credit

Deborah Babalola: Credit

Dick Tinsley: isn't the basic financial management stradgy to hold goods in kind only makerting what they need for immediate cash. This would include Madibira the rice scheme in Mbeya Tanzania, where the bags of rice filled have the small home; <http://smallholderagriculture.agsci.colostate.edu/financial-management-strategy-retain-assets-in-kind/>

Lena Heron: absolutely need for liquidity at harvest time!

Dick Tinsley: ... half the smallholders home

Dick Tinsley: Which is the greater problem insects or rats

April Thompson - Agrilinks: Such a simple solution! Does anyone have experience using improved storage solutions like this in their projects?

Deborah Babalola: Yes, in cowpea and its very effective

Deborah Babalola: Cowpea storage

April Thompson - Agrilinks: Deborah, were the bags provided free or was there a local service provider involved?

georgina bingham: Yes - we also produce different types of hermetic storage solutions - but you only need one liner, and so is much cheaper

Dick Tinsley: these bags were discussed in earlier webinar and I think the discussion recognized they would protect against insects but not rats and rats are still a major problem

Deborah Babalola: No, subsidized

Jeannette Tramhel: can these bags be re-used? or one-time use?

Jonathan Bauchet : they can be reused. they'll typically last 2-3 years

Doudou Ndiaye: Are PICS bags resistant to attack by mice and rats, which are also real threats to stored goods, since if the bag is punctured, there is no protection against insects

georgina bingham: re-use is possible so long as the liner/ hermetic layer is not punctured

April Thompson - Agrilinks: Good questions- and Dieudonne feel free to chime in here too

Dick Tinsley: couldn't these bags be purchased in components locally and assembled in farm or smallholder community

Jonathan Bauchet : they help with rats a bit -- they can be punctured, but because they create a hermetic seal it reduces the ability of rats to find the maize/grains

Panos Loukos: Does use of PICS bags require storing seeds at the right moisture content (which is not always the case)?

Farhat Kunmi-Olayiwola: Where in Nigeria are these bags produced please?

georgina bingham: we @Vetsergaard have options with a insecticide coating that also contains rodent repellent NRI and WFO are currently testing in the field

Jonathan Bauchet : moisture content is an issue. If the grain is put it moist, it will stay moist (hermetic seal). But if put it dry, it will stay dry.

Beatrice Pierre: how much does one bag cost?

Nancy Thomas: Where are they being distributed in Malawi?

georgina bingham: 50kg bags 1USD retail

April Thompson - Agrilinks: thanks for the great questions - keep them coming!

Michael Davidson : what is the life cycle of the bags? How many years can you re-use them?

Raymond Anthony: where are these bags being distributed in Tanzania?

Mohammed Ibrahim: The PICS bag is twice more expensive in Tamale, Ghana.

AV Tech: To expand the slide, hover your mouse over the four outward pointing arrows in the presentation window

Ganesh Bora: How PICS bag compares with jute bags?

Dieudonne Baributsa: The bags have been disseminated in more countries beyond the PICS3 project mentioned by Jake- <https://picsnetwork.org/where-we-work/>

Beatrice Pierre: Do you think that the improved bag by itself is enough if the storage conditions are not optimal

Elizabeth Dunn: I assume the bags are being distributed through existing input supply network, rather than the creation of a separate distribution network. Correct?

Nikesh Ghimire: How is the credit institutionalized?

Beatrice Pierre: Please elaborate a little more on storage conditions besides using the improved bag

Deborah Babalola: Farhat, I do not know about its production here in Nigeria yet.

Doudou Ndiaye: Are you aware that many PICS bags in West Africa are counterfeit

Deborah Babalola: Farhat: *I do not*

Lena Heron: How about locally managed warehouse receipt type activity that links the financial Institution to collective storage facility for bagged grain ?

Bekele Hundie Kotu: Are PICS bags profitable given that their adoption will have general equilibrium effect? I mean adoption of PICS bags by significant number of farmers may shift the low price time to the lean season and reduce the gap between the harvest price and lean season price. This may make temporal arbitrage of maize less attractive to farmers.

Kristy Cook: PICS being promoted in Eastern Zambia also to reduce aflatoxins. Cost is an issue.

Farhat Kunmi-Olayiwola: Thank you Deborah, Hopefully Jacob would be able to tell us.

georgina bingham: PICS are an amazing solution, and if you are interested in trying/ getting info on some additional options, cheaper also, with the same basic hermetic concept please get in touch gvb@vestergaard.com

Beatrice Pierre: what was the level of repayment rate?

Michael Davidson : WHAT IS THE COST OF EACH BAG PLEASE

Panos Loukos: Are loans disbursed in cash? As many of these farmers operate in the informal economy and have no access to formal economy financial products, doesn't it make sense to use mobile money for loan disbursement to support the development of economic identity? Has this been tried?

Dieudonne Baributsa: All- here is a link to the PICS suppliers from around the world https://picsnetwork.org/where-we-work/?tab_id=distributor

Beatrice Pierre: when selecting the comparison groups how did you caveat for contamination (I mean to make sure that people in this group did not benefit from any support from any other donor)

Dieudonne Baributsa: PICS bags are being manufactured by more than 20 licenced manufacturers and distributors

Beatrice Pierre: with so many observations what percent of the project budget went to monitoring and evaluation?

Dieudonne Baributsa: Farhat, Deborah- Yes, the bags are produced in Nigeria-

Dieudonne Baributsa: https://picsnetwork.org/where-we-work/?tab_id=distributor

Dick Tinsley: I think an important side issue is to look at bag size. 100 kg bags are a major health hazard, but tied to the tax structure that taxes the number of bags regardless of weight. Thus how can we get smaller bags accepted and reduce the porter injuries?

Richard Meyer: A qualification: Analysis of maize price data in Uganda several years ago revealed that post harvest prices did not always rise enough to cover storage and interest costs. This complicated the promotion of warehouse receipt projects. Speakers should comment on this point.

Ravindra Shrestha: @Baributsa: Are the local manufacturers being monitored? Personally, I have found PICS bags here in Nepal of slightly inferior quality compared to GrainPro Superbags

islamiyat ibikunle: City: Kano Contact: Ahmed Adam Kaumi International Marketing Manager Lela Agro Ltd. Kano, Nigeria Cell: +234 802 310 6992

Dieudonne Baributsa: Lela Agro in Kano is the manufacturer - contact me for more details - baributs@purdue.edu

islamiyat ibikunle: Fahart and Deborah that's the contact for Nigeria

Deborah Babalola: Thank you Islamiyat

Vanessa Adams: Can anyone explain the role of the savings group? Did they make the loan based on the collateral (filled bags)?

Farhat Kunmi-Olayiwola: Thank you Dieudonne

Michael Davidson : I am a World Bank ag consultant. Can someone please provide an estimate of the cost of a 100 kg bag and also a 25 and 50 kg

Bekele Hundie Kotu: Is it possible to use the polypropylene part of PICS bags for marketing and replace it from local markets?

Dieudonne Baributsa: @Ravindra - yes, the quality is monitored

Beatrice Pierre: During the baseline, the universe of farmers from which you chose your sample are they those who did participate in the project. Does that mean that you had a solid list of farmers participating in the project from the outset?

April Thompson - Agrilinks: Thanks for all the questions... great question, Dick, looks like they are about to address this

Nikesh Ghimire: So they take loan against stored maize, pay interest on it, and then use the loan to buy more maize to consume?

Nikesh Ghimire: Isn't it better if they just NOT take the loan and consume what they have?

Dick Tinsley: Malawi exports would be informal and off the record as Mbaya is the first city in Tanzania from Malawi

Dieudonne Baributsa: @Nikesh- the interest on the loans are so small compared to the money they would make with the price increase from harvest to the lean season

Nikesh Ghimire: Thanks Dieudonne. Understood.

Richard Meyer: Donors encourage locals to undertake risks but the locals suffer the consequences when things go bad.

April Thompson - Agrilinks: True that... though donors hopefully are also introducing solutions to offset risk, like insurance

Dieudonne Baributsa: @ Panos- correct storage of seed in these bags require drying seed at the right moisture content

Nikesh Ghimire: @april, Insurance covers weather/storage risks, but cannot cover market price risks.

Nikesh Ghimire: Market Price risk is something the farmer must always be willing to assume.

Amanda Davey: After two or three years, are the bags thrown away or are there secondary uses?

Richard Meyer: plenty of literature about the challenge of sustainable insurance.

April Thompson - Agrilinks: Absolutely.... though there is no business without risk. Farming certainly is among the riskiest!

Dick Tinsley: Instead of working with credit groups what would be the impact of working through local agro-dealers who actually handle the bulk of the marketed grain and have vested interest in quality grain

Dick Tinsley: see photo on earlier referenced webpage on financial stredgy

Krista Jacobs: What are some of the gender impacts you plan to look at in Malawi? Thanks.

Dieudonne Baributsa: @ Beatrice Pierre- a 100 kg capacity PICS bags costs between \$2.00-3.00. Price depend on country, location within the country, efficiency of the supply chain, etc.

April Thompson - Agrilinks: Everyone loves free samples! :)

Nikesh Ghimire: Is there more detail on loan drawdown? What value of the market price of the maize can be loan? Eg. if the Maize is worth USD 100, what USD value would be the loan against it?

Dieudonne Baributsa: Again the bags can be reused for several seasons- at least 3 season. Farmers like the bags because there are 2 liners plus a woven bag that make these bags sturdy

Farhat Kunmi-Olayiwola: Were loans fully recovered?

Deborah Babalola: @Farhat, 75% recovery

Adam Ahmed - USAID Agrilinks: The slides are also at the left under file downloads

Amanda Davey: That's great they last three years, then are they typically thrown away?

Dick Tinsley: Allow me a brief promotion on smallholder website that cover much of the relevant material but not necessary consistent with accepted party line. the sight is: <http://smallholderagriculture.agsci.colostate.edu/>

Elizabeth Adams: No one has mentioned the large borers, and how they are able to destroy the PICS bags. What are some solutions to this issue? And how does the PICS-3 project deal with this?

Mohammed Ibrahim: What do you think will happen after the project over? Sustainability is always a problem in most African countries.

Amanda Davey: @Dick Tinsley, thank you for sharing. This is great!

Ganesh Bora: Thank you for the presentation and sharing the findings

Dieudonne Baributsa: @Michael Davidson- 100 kg is about \$2.00; 50 kg is about \$1.50 and 25 kg would be about \$1.00. Please note that these are retail prices that include margins and costs of moving the bags to rural areas. Wholesale prices at manufacturing level would be cheaper than these.

Kristy Cook: gender & PICS bags in Zambia: [https://agrilinks.org/sites/default/files/resource/files/ING%20Tech%20Profile%20\(2016\)%20PICS%20Bags%20\(Zambia\).pdf](https://agrilinks.org/sites/default/files/resource/files/ING%20Tech%20Profile%20(2016)%20PICS%20Bags%20(Zambia).pdf)

Dieudonne Baributsa: @ Amanda- no the bags are not thrown away. They are repurposed for other uses including opened and used as drying mat, storing grains that are less susceptible to insects, etc

Amanda Davey: @Dieudonne Baribusta: Thank you!

Etienne Ayuk Ayuk Ndip: Hi to All, I am Etienne Ayuk, from Cameroon

Farhat Kunmi-Olayiwola: Are commercial banks in Malawi offering farmer friendly interest rates?

Vanessa Adams 2: A few questions: 1--how much did the program cost to rollout? 2--do you think it will be sustainable past the project end? 3--is this running in other countries, such as Ethiopia, Ghana, Nigeria or other locations you have your bags?

Dieudonne Baributsa: @Elizabeth- numerous studies have looked at LG borer and the bags are effective. A list of publications are here and many papers talk about LGB- https://picsnetwork.org/resources/?tab_id=Publications

Gowthami Venkateswaran: What about the exposed group?

Beatrice Pierre: funds for the loans are from local partners, how did the project reach out to them to make them willing to invest their money when we know how risky is the issue. What kind of incentive does USAID provide? I may think of guarantee funds as DAC for example. Please elaborate a little on that perspective

Etienne Ayuk Ayuk Ndip: What about commodity exchange associations making use of real time information to enter the market to reduce storage cost

Dick Tinsley: When maize is marketed is it marketed whole bags or just part of bags. I think a lot of the marketing is by women marketing only what they can carry on their heads and meet immediate cash needs. Refer back to referenced webpage initially from Malawi but reconfirmed over most of Africa via F2F assignments

Beatrice Pierre: what about the PICS bag disposal from an environment standpoint

Dieudonne Baributsa: @ Beatrice here is a study on the fate of PICS bags - <https://www.sciencedirect.com/science/article/pii/S0022474X14000253>

Dieudonne Baributsa: A study on how PICS bags are reused and recycled

Dick Tinsley: still no mention of PICS bags and protection from the rats

Beatrice Pierre: thanks

Adam Ahmed - USAID Agrilinks: Dick, Jacob had answered your question about pests.

Dick Tinsley: sorry must have been when I went to get my breakfast

Dieudonne Baributsa: Rats are not a major issue. As Jake mentioned, the approach to deal with them is warehouse management which is always part of the PICS training.

Nikesh Ghimire: Oh, was the loan FIXED at USD 40 per farmer? regardless of how much they could store? or you demanded fixed amount of maize as collateral?

Dick Tinsley: How much of the maize is stored in warehouse compared to in homes?

Richard Meyer: document on Credit-linked insurance: <http://documents.worldbank.org/curated/en/515371511848930976/Unlocking-smallholder-credit-does-credit-linked-agricultural-insurance-work>

Panos Loukos: Can you tell us more about the use of mobile money for loan disbursements and collections please? Whether it has been used, who with, challenges there, plans for the future etc? Thank you

Dieudonne Baributsa: @Rats- we think that because PICS bags have 2 heavy duty liners and 1 PP bag, the rodents are not able to see and smell what is inside the bags. so these make the bbags less attractive to rodent attacks.

Dieudonne Baributsa: Paper on PICS and LGB <https://www.sciencedirect.com/science/article/pii/S0022474X14000290>

Richard Meyer: 12% loans will hardly cover inflation rates.

Richard Meyer: Seems like the financial side is destined to be unsustainable.

christine westercamp: Yes, I share your view, Dick

Richard Meyer: too bad. Interesting ideas but makes no sense to test concepts without thinking about sustainability from beginning. Tough challenge. Thanks for the presentation today.

Dieudonne Baributsa: @ Ganesh Bora PICS bags are hermetic but jute bags are not. here is a description of PICS bags - https://www.youtube.com/watch?list=PLwEB9ze7-IMloguZPrQxc6Xi027Mql4OW&time_continue=5&v=09DYuLJtgNs

Panos Loukos: Is 12% an annual percentage rate or for the length of the loan period (6 months?)?

Godswill Egbe: Please I need detail information on how the PIC bags could be purchased in large quantities for penetration into remote local farmers cooperatives.

Richard Meyer: April: Thanks very much. Signing off.

April Thompson - Agrilinks: Thanks, Dick! Unanswered questions we will try to answer in a follow up Q&A on Agrilinks.

Beatrice Pierre: what can you say to somebody to switch from silos to the PICS bags?

April Thompson - Agrilinks: Beatrice, it sounds like offering the free sample to allow them to try it out was effective, given the adoption rates they reported.

April Thompson - Agrilinks: Of course that was with a loan too, which obviously made it more attractive.

Dieudonne Baributsa: @Beatrice- what kind of silos are you referring to? Do you apply chemical in the silos?

Beatrice Pierre: I am referring to the silos made of metals. usually, we don't use chemicals in them

Dieudonne Baributsa: @ Beatrice- the challenge with silos, you have to fill them otherwise the airspace would provide oxygen to insect to continue damaging the grain

Dieudonne Baributsa: Advantage of PICS is that it is a collapsible hermetic container. With a 100 kg PICS bag, you can store 100 kg grain or 50 kg or 80 kg grain

María Isabel Cartagena: Keep making more webinars

April Thompson - Agrilinks: Thanks everyone! Please do answer the polls before you leave the webinar.
Appreciate all the great engagement today on this topic!

Adam Ahmed - USAID Agrilinks: Thank you Maria!

Ueli Scheuermeier: Our farmers said they prefer metal silos because they can't be carried away by pestering relatives!

Dieudonne Baributsa: Thanks, All!

Raymond Anthony: Thanks for the webinar, very informative

Dieudonne Baributsa: Again more questions on PICS baributs@purdue.edu

Dieudonne Baributsa: or go to www.picsnetwork.org

Adam Ahmed - USAID Agrilinks: Thank you so much for answering all of these questions Dieudonne!

Gowthami Venkateswaran: Hi Mr. Dieudonne Baributsa, I have read your papers

Dieudonne Baributsa: Thanks Adam for this great webinar

Gowthami Venkateswaran: All of them were good with effects of PICS

Rachel Ochako: Very informative webinaer ! Thank you !

Gowthami Venkateswaran: Is there a comparative or economic analysis for the farmers who use them?

Dieudonne Baributsa: <https://www.sciencedirect.com/science/article/pii/S0022474X13001033>

Dieudonne Baributsa: <https://www.sciencedirect.com/science/article/pii/S0022474X14000228>

Gowthami Venkateswaran: Thanks for directing me to these papers. This session was very informative.
Thanks again to all of you.