Simulating the Market to Change Agribusiness Behavior

Audio Transcript

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# Presenters

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# Presentation

*Kristin O'Planick* So I'm Kristin O'Planick, from USAID's Bureau for Economic Growth, Education, and the Environment. And a warm welcome back after our summer hiatus from the seminar series. So we're glad so many people could join us on this lovely September day, even if the Pope kept us all inside. So market systems development requires key actors to change their business models, promoting economic growth, and reducing property.

However, these changes often require market actors to change engrained mindsets and behaviors. We accept that logically, but the challenge remains in how to make that happen on the ground. And this is something that we know, we all are struggling with, and why it's important to share the lessons where we have them. So nontraditional training methodologies, such as simulating changing market and business systems, can be highly effective at changing behavior.

They support more natural learning contexts, and help shift deeply rooted mindsets. However, simulation training tools can be complex and difficult to design. Today, Margie and Annah will share insights from market systems development projects in East Africa on the design and testing of appropriate tools. They will also discuss lessons that local private sector market actors have learned about rollout models, which will be particularly applicable to input supply and output buyer systems.

So let me tell you just a little bit about Annah and Margie. So Annah Macharia is with Technoserve. And Ms. Macharia is a program manager in their agribusiness development program in Kenya. She has 13 years' experience in market and financial service development. Ms. Macharia has both practical business experience as well as project development expertise. And, most recently, she has managed market systems development programming in Kenya's dairy sector, for a DFID funded project targeting improvements in the performance of feed, breed, animal health, and milk supply chain market systems. So I think it's the lessons from this particular project that she will be sharing with us today.

Mike Field, unfortunately, has gotten too ill to join us. So, sadly, he won't be joining us to present, but will, can, be a resource. So and Mike brings a wealth of experience in this field. He's recognized as one of the world's leading experts on market and value chain systems. So we're lucky to have him as a resource, even if he's a bit under the weather. Thank you, Mike.

And Margie Brand is a senior technical lead for EcoVentures International. She has over 20 years' experience in strategic planning, tool design, and technical support in enterprise and market development, with a focus on vulnerable populations. She has trained over 4,500 trainers and master trainers. Margie, how are you counting all of those? Has developed curricula and tools which have been translated into over 15 languages and used in over 35 countries. She's designed and managed several multimillion dollar development programs, and has worked in over 20 countries in Asia, Latin America, and Eastern Europe, with a focus on her home continent of Africa.

So, with that, I will turn it over to our presenters. Thank you, everyone, for joining us.

*Annah Macharia:* Good morning. This is Annah Macharia.

*Margie Brand:* And this is Margie Brand. And Annah and I are together in Washington, DC. We are excited to be talking to you today about some of our work around what we've been doing in terms of alternative forms of capacity building, training, and different components that actually change behavior. And we're really sad not to have Mike with us. He's actually been updating us for the last 24 hours on and off as to whether he thinks he would have enough energy to actually get on this webinar. So I'm sorry he's not able to be with us today.

So moving into the conversation, we really wanted to start by pointing out that a tool is not powerful in and of itself. The tool we're going to be talking about today, the simulation methodology, is by no means a silver bullet. It's definitely something that is a very powerful way of influencing behavior and bringing practical experience to people. But it is one component of something that is larger. And we really are going to focus on trying to explain that the context that this really works well in, and how. And times when it doesn't work as well.

So, as you can see, we've said the solution is only as powerful as the problem it's trying to solve. So we really are also going to focus on what are the problems, and what are the behavior changes that we're really trying to inform different circumstances? And in the same way, a tool is only as powerful as the behavior it's trying to change. And it is what we are trying to achieve that actually ends up giving it power. So that's really the perspective we want to bring to this conversation today.

We thought it was helpful to start by looking at what are key questions that projects in market systems development context are trying to address, that are useful in order to feed in these kind of behavior change tools? And we recognize that some of the initial questions can start by looking at what behaviors do we really want to change? And we recognize that in the context of market systems development, much of our work has been recognizing that suppliers' and buyers' practices can impact the wellbeing of low-income smallholder farmers that they're either supplying to or buying from.

And there's a need in many contexts for those firms to become much more customer or supplier focused in order to drive benefits to those smallholders. And this implies often a strategy where strategic investments can be made by those suppliers or buyers to grow the long term value of their businesses, and ultimately build loyalty, trust, and stronger relationships with the smallholders. So these are some of the behaviors that we're often aiming to, and some of the tools that we've been using. And Annah's going to speak about some of the case studies around – really trying to address.

After that we tend to ask ourselves the question of what message is really needed? So after we understand the behaviors that need to change, what is the messaging that would be critical? And who are appropriate market actors to actually pass that message on? And then ultimately what are appropriate tools? And, of those, we're going to talk about one of those, such as using market based simulations today. So that's really the context that this falls into.

We recognize that what we're really talking about here is experiential learning. And that experiential learning, we've found, is a really powerful tool to support behavior change. There's a recent study that came out, or an article that Mackenzie put out, on experiential learning. And one of the points made is successful transformations demand new capabilities. And to build on experiential learning leverages the intimate link between knowledge and experience.

And what we've found is that the simulations are an effective way to make that learning more experiential. Especially in cases when it doesn't make sense to be doing a live experience. We know that practical experiences are really valuable, and getting a real life experience. And what simulations are doing is allowing participants, allowing market actors to be able to experience something but a little bit out of the reality of the real world. So something reflecting the real world, but where it doesn't make sense – maybe because it's not practical to be doing a live case, or we're doing on the job training so it's something that's more accessible.

What are we talking about when we talk about simulations? We really are talking about interactive in-classroom activities that somehow simulate reality. You can think about people who are in flight simulators, who are learning how to be pilots. They're doing something that is similar to their ultimate experience, but is not in that experience. And what that allows them to do is to actually make decisions, and immediately see the consequences of those decisions, but in the safe confines of a training world.

So a lot of that is about simulating something so they can be bold in areas and see what happens if you change a business model, what happens if there's a key market actor in the system starts acting or behaving in a different way, how does that impact the overall system?

In this specific case that we're going to talk about today, it's looking at facilitator-led simulation. So something that's not participant self-led, but that's facilitator-led, so there's really a very intentional learning that can be built in. Something that's non-computerized. People hear the word 'simulation', they're often thinking of something that's computerized. What we're talking about today is something that's non-computerized. Although there are many different types of training tools out there that are computerized-focused. But what we have found is that in the audiences that we work with, and that Annah will be talking more about, non-computerized seems to really agree well.

Something where there's several modules that people work through and are simulating different types of market systems with people almost in groups and teams competing with each other. We recognize that simulations are particularly effective. And I really want to point out that Mike Field has been someone who has really sort of been the person who has conceptualized a lot of the links between what we've been doing with traditional simulations, and the teaching method, and the training method, to look at how that can be adapted for behavior change in market systems.

So I'm sad he's not going to tell you the vision himself, but this is something he's been developing over the last few years. And I think the recognition is really that markets are complex, changing systems. And how do you allow both market actors and others that are intervening within that system to understand and recognize what are the implications of some of those changing, complex systems? Where a deeper systemic change is often needed. And where it's often linked to needing deep, rooted behavior change by various actors in that marketplace. It's much more than acquiring a skillset or even acquiring a different mindset. But how do you really start aiming at a deep rooted behavior change?

And something where that behavior is often meeting new business models. And people actually changing the way or focus of how their business is running. Either by bringing in a new method of distributing, for example, or, if they're in the input supply area, maybe using distribution methods to get out to more rural areas.

Maybe they're working with producer buyers' clubs and setting up buyers' clubs with producer groups. Working through agent networks, village agent networks in different areas. Maybe suppliers are – or rather buyers or processors in a particular community are changing business models where they're actually looking at showing much closer relationships with the farmers that they're actually purchasing from.

And being able to track productivity levels with those farmers. Working with some of the lead suppliers or farmers to be able to advocate for new practices, etcetera. So it's really changing some of their thinking. And this is something that we've found that simulations are really powerful in being able to bring those dynamics into a training room to be able to allow people to start understanding the various aspects of the changing system, or what happens when they change in a particular way.

What we've done is to adapt some of the work that has been done, and that our organization, EcoVentures International, and others, have been doing over the past few years – and the map on the screen shows some of the locations where we've been trying and testing the various simulation methodologies with other groups. And the small little red areas are showing where we adapted this specifically in a broader market systems development perspective. And Technoserve, and Annah represents…talking about the work that Technoserve has been doing in Kenya.

They're probably the most advanced. This also sort of with some of the thinking that was birthed by Mike Fields, on how to start incorporating the market systems development work with simulations. And Annah's going to talk specifically about the work they've been doing in the dairy sector in Kenya. Feed the Future program in Uganda, the ag inputs activity through Tetra Tech, is also using some of these methodologies, and looking at how to connect them to the work that they're doing.

In the planning stages of some of the work being done through the ILRI program – International Livestock Research Institute – in Kenya, also under Feed the Future program, which is very much in initial-initial planning stages. And then the work that Mike Field is now doing in Bangladesh with DAI on the ag value chains project, where they're looking at – and started working around using simulations not only with the market actors, but also with the various implementers, implementing partners in the country to start understanding how can they actually – how can their work as implementers be affecting change in some of those markets? And what are the implications of some of those changes?

And we'll talk a little bit about the methodology that will be used behind that. We thought it'd be useful to very quickly give you an overview of what it is we're talking about in terms of the one case study we're going to use. Again, we're using an example of almost a training tool that's been adapted for a market systems development training concept, and will be further adapted for each of those programs that we'll be working with.

But I did want to point out, obviously, that there are many different types of simulation methodologies and people that are doing interesting things here. That could be interesting to connect with. So the point of what's on the slide is not to read all the detail on the pictures, but just to show very basic room setups. You can see kind of the facilitator on the left-hand side. There are participants sitting in groups. There's a gray facilitator table that has various components and elements on it. There are things up on the walls. Some of those are spinners that kind of move around. Things people kind of put little cards and randomly can pull out different cards that are introducing different scenarios and issues.

The participants actually have different things on the tables in front of them. One of the things we've found to be particularly useful, which is an example of the variation of the simulation tool that is focused on the input supply sector is where we've linked the improvements or growth of each of the business teams are competing against to not only a financial reward, but also the level of customer loyalty. So it's an interesting variation on some of these traditional type of business modeling, where people can actually start seeing the greater customer loyalty, and how that is linked to various investment options that the various businesses might be making, and how does that link to ultimate growth in the system.

And continually throughout this simulation, what is happening is different actors are changing behavior in different ways. You can start seeing the impact on the greater system overall. Some of the key learning areas that we found useful to emphasize is recognizing common challenges which are being faced by various levels of agribusiness, whether on the supplier or producer side, and also on the input side – is to recognize what are some of those challenges.

These are raised in different ways through the simulation, where people can be forced to make difficult decisions around these. And some of those – and we put this at the top of the list – is responding to social and community pressure, which we recognize is often it's not simply business, straight business. People are have their own social groups, their own political groups, family groups. And these are often putting a lot of pressure on how they are making business decisions, and what is actually the key behavior driving the way they are running business models and changing their practices.

So this is a really key piece built into some of these simulations. Also, things such as balancing needs between financial needs between the family and the business. Even in larger agribusinesses it often becomes a real challenge. And dealing with unexpected types of events and unforeseen circumstances. And then other issues around managing cash flow is really critical. And there's so many variations of how cash flow can really make a difference in the business. So it's really understanding some of those implications. And, also, very importantly, is strategizing and investing in different types of areas that can grow the business. That's a really key focus in terms of what can grow that business.

There are certain growth investment areas that have been built into the different simulations that are adapted for these different contexts. This is just generalizing. Some of those are options to invest in financial management systems. Invest in stock management systems. Various customer management systems and promotions that can be used.

So if you know who your customers are, and you've invested in a customer database, you can then SMS information to those customers, so farmers can be getting information about what's kind of needed at a particular time, what kind of inputs are helpful, how to use those, what's on special, because the input supplier knows they're about to expire or needed for a particular harvesting season or growing season. How to build farmer group relationships, using different investment options. Remodeling stores. Working with village agent networks. Whatever it might be. So these are all things that are built in and explored in different ways in the simulation.

So I wanted to turn it over to Annah to talk a little bit about a case study in Kenya.

*Annah Macharia:* Thank you, Margie. So a case study for our Technoserve programs in Kenya is that we've been working with EcoVentures International for trainings in agrimarket simulations. Training is a very important component of all Technoserve projects. But there have been challenges in providing local, up to date trainings that stay on even after a donor intervention. In recognizing this challenge…look for alternative work force market driven solutions.

So some of the things that we recognized, to be able to design or come up with a market driven solution, were that connecting direct training eradicates commercial training firms. So where Technoserve in the past has provided trainings to input dealers as well as farmers, we realized that after that – after the donor funding, all that project comes to an end, really are we able to continue to see increased investments by smallholder farmers?

The second thing we recognized was that working with farmers in some realities results to – So the second thing we realized was that working with farmers in some cases be the least effective entry point to gain system change, as farmers have the least influence on market system changes. The first thing that we recognized is that if we trained the agridealers, or the retailers, to see the value of the farmers, then they would be able to invest in changing the behavior of the farmers.

So, to make an impact, what Technoserve did, we engaged with EcoVentures International to develop tools to train the agridealers. And this is based on EcoVentures' already established methodology, to develop tools. Some of the beneficiaries that we've been working with include large dairy cooperatives. These cooperatives provide support to their input supply dealership partners. We've also been working with input supply dealers and beneficiaries. These are agridealer shops that are owned by individuals in serving farmers in the rural areas.

The other beneficiaries have included academic institutions who are now beginning to train agridealers. So, for example, the United States International University, abbreviated as USIU. USIU has even gone ahead to introduce an agricultural degree program, whose training methodology will be based on the training tools that have been developed by EcoVentures International.

Some of the delivery partner agents that we've engaged with are reputable management, marketing, and training institutions in Kenya. So this – professional firms were not providing the services, the training services to input dealers in Kenya in the past. But, through the program, after the training, they've now introduced differentiated and affordable services to agridealers. So they include KPMG, Sawah, who are a local partner to Deloitte Consulting Partners, and we have PKF International. We have a local East African firm – for example, Septro.

Marketing firms, we have currently working with three marketing firms…ventures. We have private sector training institutes in academic institutions. Mostly, universities. We've been working with the United States International University. And to rollout an internship program which is now serving rural businesses, specifically the input supply dealerships. And, as a result of that work, that just one pilot, other academic institutions have expressed interest. So, currently, in addition to this one academic institution, United States International University, we are also working with five other academic institutions.

Other agents include private sector processers. We are also working with government, specifically the regulator for the dairy industry in Kenya, the Kenya Dairy Board. Kenya Dairy Board is an agent for scale. They have a mandate to provide improved services to the dairy sector, and they are interested to scale market based solutions to the industry. So we partnered with them as an agent for scale.

Some of the behavioral changes we began to observe in the market, starting with the input supply dealers, is we've observed three main changes. So changes with investments. And this happened immediate three weeks after the training. So with regards to investment, there were commitments and investments made after the simulation trainings. Commitments include trainings of staff members in customer service, sometimes in collaboration with the input manufacturers or distributors. The second investment we've seen is in inventory or customer loyalty programs, IT solutions. We've also seen improvements in shop remodeling and product layout or merchandising.

We've also seen investment interest in staff training. Staff training, where we have a retailer investing in the training and not having to depend on an input distributor to come and train on the products that they are promoting. We've also observed changes in the mindsets of the input dealerships. So, for example, there's been a change in the way that input suppliers are valuing or seeing the business potential, serving farmers better. So they want to understand what are the concerns, what are the needs of farmers, and wanting to address that.

We've also observed changes in adapting to growth oriented behavior. So, in the past, the focus has been on short term gain. So very high profit margins per product. But then now the input dealers are changing that strategy to long term growth, where they even discussed negotiating with input distributors for discounted pricing that can be transferred or passed down, whose benefit can be transferred to smallholder farmers.

The other behavior changes are with the support service firms. So it's a market-led training. So Technoserve is not providing the training. We've been engaging with the traditional providers of training services in the country. So previously they were not serving the agridealers or…businesses. But now, through the program, after the training, they've developed suitable offers to the dairy industry.

So, for example, we have the management, the market team, the training firm, the academic institutions, the processors who have tailored their offers after the simulation trainings. In terms of adaptation, after working with the initial pilot, especially with the academic institutions, they've further adapted the training to their degree programs, not just for new agricultural degree programs, but for all other trainings that have been conducted at the university.

We've also observed behavior changes at the smallholder level. And what we've observed is there's increased investments in agricultural inputs. And this is proven by the changes in revenue and sales by input supply dealers. So, over the past six months, we've seen an increase in the number of customers that have been served by the input stores, as well as the frequency, the constituency in purchases, the increase in purchases as well. At the farmer level, farmers are now having reliable and quality supply of inputs that could result in increased production, and therefore milk sales.

And I'll hand it over back to Margie, just continuing talking about the case study.

*Margie Brand:* Great. Thanks, Annah. We wanted to talk about another case study which several people have asked us about. And this is just a small component of the bigger project, but it involves youth entrepreneurship, so we know many people were interested in this. One of the things we've been doing with Technoserve is developing the student internship program that Annah mentioned earlier. And we actually call the student interns agribusiness consultants.

And one of the areas that we focused on was assisting initially one of the private training providers, which was USIU that Annah has spoken about, in setting up and strengthening an internship program that had a very basic internship program. So we worked with them on how to strengthen that, and how to start partnerships with other universities from which to draw students, all with the objective of being able to get expertise into the agricultural sector, and expertise into being able to – because many of the young people want to leave agriculture.

They don't want to be involved. It's not where – if they're going to run an internship, they want it in a lofty…city somewhere. And so how do you incentivize people and sell this option to students so they are actually interested in bringing their expertise back to the agricultural sector? So what we also realized is universities needed the support of how to actually partner with the agri-input companies to be able to host interns. So kind of how to make the market offer, which was originally cost-shared. And then also how to train those students, interns.

And this is where the simulation was really effective. Because what we realized is those students needed to understand how the sector worked, in as real a context as possible, before they were actually planted in that system. This allowed them to see how that system works, but also empowered them to get tools they could use within those internships so they could add value. So students were actually empowered on using the simulation themselves to be able to train and empower those market actors that they'd be working with.

And also on how to train the students, how to use those tools. Some of the outcomes have been really exciting. Students from not just the agricultural faculties have become involved. So what this is doing is it's incentivizing students that are not just in agriculture, but are bringing their own skills into agriculture. Several of the students have been hired by the firms that they were working with. So these students that are not only in agriculture are now also being drawn from these five other universities are now being planted into the agricultural sector, even if that wasn't what they were studying, and they're from multiple universities.

The universities have actually – on 100 percent their own funds – started looking at how to adapt, or actually have already adapted, with and contracted EVI directly, to adapt the materials to be part of their course and degree programs, and also part of their short courses for agribusiness entrepreneurs, which, for us, is affirmation that they're seeing this as something that's really valuable. What we've also found is that the students that are involved, some have actually started their own consulting firms. So having graduated, they've started a consulting firm that is now helping their agribusiness sector to be able to change and introduce some of these business models and new investments.

So we really are excited. It's something that is being sort of – that's demonstrating that it's a way to – these student internships programs, with having the appropriate tools that they can use, and they – kind of guiding businesses in a way that we know will ultimately have sort of a poverty alleviation focus in the country – is something which has given legs to getting more of that expertise within the country.

What have we found, ultimately, about simulation methodology, is that it is effective in some of these market systems development contexts where we're trying to change behaviors by reflecting real life contexts. It's something that's highly interactive. People are having fun. They're seeing the impact of different business decisions immediately. It's kind of contextually relevant. And it's allowing people to experiment first and learn in low risk environments.

And what's been useful is the delivery partners that, in this particular case, for example, Technoserve is working with, and, also, in Uganda, where they're looking at private sector and working with private sector delivery partners, is that those delivery partners are actually able to become the people that are training. They are able to provide this on a fee for service basis. And they build that into whatever their standard business offering is. So it's something where they feel that they can maintain the fees that are being charged. It helps them as kind of market related fees. Which means that there needs to be both awareness around the market opportunity for them, but also awareness from the sort of agribusiness, whether it's input dealers' or processors 'side, on the value of being able to pay for something like this.

Which is why some of those delivery partners are actually doing this as part of other services they might be providing to those firms. Also working, for example, in Annah's context, as she said, through large dairy cooperatives, which have 5,000, 7,000, 10,000 members in some cases.

One of the biggest things we've recognized, and EcoVentures International has been doing simulation design for many, many years, and obviously more recently in this market systems development context, is that designing simulations is not easy. And it's people say – and this is a quite from Jack Dorsey, the creator of Twitter, and founder of Square – he says, "While it's really simple to design something complex, it's really complex to make something simple."

And the thing is that getting to simple is very difficult. And what we recognize is that knowing how to simplify something is the difficult piece. So we recognize that there's sort of this continued process that we go through, where we're really starting to look at what – how do we know which messages to push? Because I'll talk a bit about our process, then speak about some of the challenges that can materialize out of this.

The first key thing is to research the market conditions and underlying behaviors, which we've done in close collaboration with people like Mike Field who is brilliant in understanding and seeing these. And the folks like Annah at Technoserve. Identifying some of those behaviors. And those learning objectives. And then doing those – that initial design – testing things. And a lot of what we're testing is not just people's behaviors that change because they're put into certain types of situations, not just how the numbers work out – because we've got to make sure the numbers are always going to work out every time this is kind of interacted with – but also the emotions.

And the emotions are really a key piece. They often is what is sort of a foundation of behavior change. What emotions are coming out of what stage, and how do we make sure those are built in to be very intentional? We do a lot of testing. We do a lot of adaptation. Training of trainers. And then also work with firms. And then on their own, already, we're seeing some of the firms that are delivering this have one their own adaptations in different ways, which is really exciting. So a key piece for us is not just looking at adoption, but adaptation, too.

This is just showing that simulations, one of the things they allow is not just sort of a less riskable opportunity to make decisions, but it's also allowing sort of a way to experience emotions. And what people seldom realize is it's actually experiencing disappointment. It's experiencing failure that allows us to really drive behavior change. Because we can see what happens. This is something that is a really, really key piece that's built into the simulation type of experience.

So the people are kind of saying, "Oh, I lost all my customers when I made these kind of investments or changed my business model." Or, "I can't handle, this is too stressful. So actually even though it makes a lot of logical sense, it's not something I want to move into, because I'm feeling too much stress." Or, "This seemed to work, but something else really burnt me." So whatever it is, it's kind of recognizing that those feelings and emotions are often what drive decisions.

And we might think and when we should be doing…training evaluation, thinking, well, why is something that seems so obvious to us from a bird's eye view, looking at the market system, why are people not making those changes, and why is that system blocked in a certain way, or what's happening? And often those are actually structural, but often they're also looking also at the much deeper things that are driving behaviors.

We wanted to talk a little bit about what are conditions for success or failure. And we chose three to focus on. The first is a need to introduce investment options that are actually available in the marketplace. So, once again, this is not something where we just have something that's replicable and kind of gets rolled out as a silver bullet across countries or across contexts. We really look at what are the kinds of investments that firms can be making that can change business models that will ultimately have a beneficial impact on low-income farmers and the community.

And in some cases, that means working alongside what projects are already trying to strengthen in the context of their projects. The other one is – obviously this doesn't exist in isolation. So, again, framing this in, coming back to what we started with, a tool is only as powerful as the behavior it's trying to change, and the challenge that exists. So it's really looking at what else is needed, following up on participants on how do they then change some of those business models. And preferably that's not something that's done through the project in the cases we're working with. It's done, again, through the various delivery partners. And working with market actors primarily in that way. Although a little bit of a blended approach initially.

And we put the last pieces – we talk about simulations, it's often like gaming. And you really need to focus on being able to bias that in the right direction. When you're talking about delivering a more traditional type of training or capacity building, sometimes it's safer. Because you can be giving information, and people kind of walk away. A simulation is extremely powerful. So if you're building something where you're definitely biasing the way people's behavior is going to change. So we take that very seriously. I think it's something we should all take seriously. How do you think very carefully, how is there enough testing and trialing done to know which way should we be biasing something, and how do we change that?

So in the same way that market systems development anything we're trying we're kind of doing it in small riskable steps before we kind of take it into scale, it's very much the same with this type of methodology, because it is so powerful in being able to change behavior. We've really got be careful about the kind of messaging that is being put out. And the way that we're advocating for the system to change.

Questions and Answers

*Margie Brand:* So we definitely wanted to leave enough good time for questions and discussion, and there might be ideas and input from others. And thanks for the very healthy chat that's happened. What we'll do is we've cataloged a lot of these questions we haven't been able to cover while presenting, and so maybe we'll just go through a few of those.

So I'm going to start with a question from Sashay Salvendrone, and I'm going to ask Annah to address this question. And, Annah, the question from Sashay is – how did you select the delivery agents? And did you have any local NGOs express interest in becoming certified trainers? I suppose the question is about selection but also is it local NGOs, or is it other types of delivery agents?

*Annah Macharia:* So very specific for us, we are interested in working with partners that can deliver the training even after the donor program comes to an end. So the delivery agents we're talking about are reputable, renowned professional firms. The management firms, the marketing firms, and even the academic institutions. And the way we went about selecting them is key for us was we wanted already existing providers of trainings. But then maybe those trainings were not – even though those trainings had not yet been customized, to meet the needs of the input dealers. So that's how we went about engaging with the different delivery agents.

Again, just using the market…tools, how do you select partners? The real skill. We use a real skill matrix. Are you willing to provide the services to a new client group? That was very key for us. Then, of course, thinking about the price point to these input providers. In relation to having non-governmental organizations express interest in becoming certified trainers, that has not yet happened, because…the focus is in engaging market – people who can provide these services long after the project comes to an end.

But the interest that we've seen with non-governmental organizations is in engaging the delivery agents. So we've seen a lot of interest in, for example, programs that are being run, programs that are being funded, in dairy, that have been funded by Bill and Linda Gates. They want to engage academic institutions to help them roll out the input distribution networks with university interns. We've also seen other non-governmental organizations wanting to engage the management consulting firms who are not only providing training services to the input stores, but as well as to the businesses – for example, dairy cooperatives – in relation to human resource, financial management, advisory services.

*Margie Brand:* And, Annah, we're going to refer another question to you after I address some of the others. I'm going to tell you what it is, going ahead. A lot of people have been asking about sort of the post-training follow up, the indicators, how do you know that people are actually making a change in the right direction? So those type of areas. We'll talk about that in a second. I wanted to speak about some of the questions that are coming up. And one of the questions was about other cost-cutting messaging, like nutrition. So what we've found is different programs often have different types of messages they want to get through. So we can start building those in.

So, for example, in Bangladesh, one of the Feed the Future programs, that's something where nutritional messaging is built in. So it could be nutrition, it could be anything. So what happens in the power of simulation is you can build in a lot of these cost-cutting pieces. But the reality is you want to build it in so much so that it doesn't dilute the other messaging, or the learning. So that's something we keep a very careful hand on.

But, yeah, that's definitely something we find is very important. Another question was about how do you start simulating? If it's non-computerized, how do you simulate some of these complex relationships that are taking place in interconnected market systems? And the key is to put scenarios forward to people that they are actually starting to play out what is that – how does that system start working? So you can imagine some of the – I wish we could have shown you videos rather than just photographs. Because what you'd be seeing is people standing up, moving around, negotiating with each other, talking about different ways, and thinking about new ways to move the system forward.

So there's a lot of movement connecting going – and then what we do is we can build some of those in by putting new scenarios to people. So people who are designing situations, such as we've done, can put additional scenarios in where you say, "Well, now this is going to act in this way or this way." And the reason this is facilitator-driven is because a facilitator in the front of the room can see how the system is unfolding, and can decide when to put new things forward.

So can decide, "Well, this is a scenario I really want to try and bring out here, we're not seeing enough of this, so we need to focus on a particular piece." And so that's been a really key sort of way to recognize this is such an interconnected system. Annah, if you want to address the question about some of the indicators, and also just how the in general what some of the tracking is.

*Annah Macharia:* So, after the simulation training, what we do is Technoserve has mixed follow-up visits with the individual businesses. We also encourage the change agents to make follow up visits, because they'll be looking for opportunities to provide additional services, apart from the training, to these input dealers. So we make the follow up visits. And when an input store confirms interest, for example, in investing in inventory solutions, IT solutions for inventory, customer management, or staff training, what we do is we help them develop a scope of work and to advertise, to engage with a provider of those services.

And we are preferring those providers who have already been certified to provide this service. And those who have already gone through the input distribution training, the simulation training. We think that they're most suitable to be able to provide the follow up support or follow up services that are required by these input dealers. So we work with the businesses, we support them to develop their scope of work. And sometimes we even go as far as in helping them to negotiate for a service offer from the change agents.

In relation to how we track the investments, we have tracking tools that have been developed based on standard business practices. So for example, if an input store is investing in improving its distribution networks, we want to know what was the cost of making such an investment. And then what have been the sales, the increase, improved revenue that has resulted from that investment? So I would say as a program right now where we have direct involvement we are following up with the individual businesses to find out after this investment, what have been the impact on their businesses?

I hope that addresses the two questions.

*Margie Brand:* Thanks, Annah. Some of the discussion and questions are focused a little bit on some of the logistics. I'll talk a little bit about that in recognizing again that this is one example that we're working on, but there are probably other examples. So the simulations that have been used in Kenya are about in terms of lengths of time. I mean you're talking about something that is probably about a three hour training experience for businesses. But the key is someone asked about it being used again as the opportunity for people to kind of participate again.

And the key is to allow market actors to participate as many times as possible. So in reality that often means two times or three times. And/or coming back to later. But you need to learn, if you think about your own learning experience, we need to learn from error, and learn from a way of doing something, or we need to learn by testing new ways of doing things. So you almost have to learn, reflect on that learning, and then try again by testing something to see how things play out the next time.

So it really is key to kind of be doing this several times over. Someone asked about the replicability across country context. I would say the question is even deeper than that. It's really about is there replicability across market systems, value chains, as some of you mentioned call them, replicability across regions, cultures, borders, whatever it might. And this is something where we really don't see this as a cookie cutter something that's designed once and rolled out. It's really something that very much gets adapted not only to a country or region. Like what are some of the critical issues?

Counterfeiting is a really critical issue in the input industry in Uganda. And so that's something that's very intentionally built in more there than maybe in some other areas. And so it's really looking at what – how do you focus in, hone in on some of the things that are impacting industry in a particular area, and adapt and test accordingly, which is really key? Someone talked about cultural implications in terms of outcomes. Cultural implications are – and how people learn, and how they change behavior is really critical. So, again, this is not a silver bullet, it just happens to be a very effective way to get the sort of reality of changing market systems into a training room.

Someone asked about gender, and if there are sort of gender issues being considered. And what we haven't done is to out rightly try and make gender statements through this material. Because what we – it's very interesting how things unfold naturally, and what you see happening by how participants are behaving. But this hasn't necessarily been used as a distinctive trying to change the gender norms. What it has done is being able to empower people that maybe not wouldn't necessarily be empowered by something. So it gives that opportunity. Often that means the implication is to women in a particular area. But it's not something where it's been sort of built in as we're trying to make a statement.

Is it possible? It probably is possible. Would it take a lot of…testing? Absolutely. So, Annah, and a lot of the questions coming in area also about the internship program specifically, and about people and sort of getting employed or not, and what is the outcome? I know this is kind of in some of the initial phases of the internship program, and I think the universities are kind of re-running it now, and more universities are involved, but can you talk a little bit about some of that program? I'm asking you to do that although know we've been so involved in it, too. But that would be great, just a little bit more context about the program.

*Annah Macharia:* Okay. So the way we went about engaging academic institutions was when we wanted to test this out, this simulation training, a lot of the businesses, a lot of the input dealers, they wanted – they confirmed interest in changing their business practices. Again, there was need to look at local affordable services. I mean what they can be able to afford. And not just thinking about the training, but then what about people who can help them take the journey in terms of investment in what they've already been trained in.

So for that reason, Technoserve had worked with USIU in the past, United States International University in the past, to develop and roll out trainings for board members of pastoral – for dairy cooperatives…farmers. In the pastoral communities. And this academic institution, USIU, confirmed its interest to be able to not only just come up with a right training solution for board members, but as well as they agreed to attach their interns to…businesses.

So what we did is, working with EcoVentures International, help them to adapt their training to suit these input stores, these rural based businesses. And the pilot started with about eight interns who have even gone ahead and set up their own consulting firm to roll out the trainings, and take the journey with their input stores for a fee, as well as the United States International University now being able to engage not just their own interns, people who are graduating from their institution, but then also partnering with other academic institutions, both local, both private and government institutions, and training them and attaching them to input stores.

So I would say that's the journey we have taken. Really long journey from the point where USIU confirmed its interest to provide the training, as well as in working with their interns to send them out to the rural areas, something they had not one before, adapting their training methodologies to what is most suitable to input stores, and to where we are right now, where they are partnering with other academic institutions and recruiting from those academic institutions and sending them out to people to provide similar support to other businesses. Thank you.

*Margie Brand:* Thanks, Annah, that's really helpful. And we've got a really good question here I wanted to address here, from Wooday Lesson Solay. And the question is – Do you have scenarios where this did not really work, and have you pinpointed why? And I would say, yes, definitely, we have many scenarios where we've had to go in and make adaptations and make improvements. I'll list some of those as examples. The methodology seems to work really well.

I mean that's something we definitely find, as sort of using simulation methodologies to be able to – across cultures and borders and something that works really well because it's exciting and different and people can really get into it, and they can feel their light bulbs. I always talk about light bulbs going off. They can feel the sort of lessons they're learning all the time, and kind of this deep thing. So that works really well.

But we really do a lot of testing. We've done things where we kind of see we're pushing the wrong message. It's like you didn't intend it. And start testing this and you realize the whole wrong message is being pushed. Got to really go back to the drawing board. Or are you trying to – one of our biggest challenges, especially with working with partners who maybe aren't as familiar with the methodology is trying to push way too much messaging into a particular module. And not realizing that too much actually dilutes a lot of the learning. You've got to hold certain pieces stagnant in particular variations to be able to bring out some of the other learning.

So that's been something that's really effective. We've also seen times when people have, for example, used simulation methodology maybe for three days straight solidly, and it's the kind of thing where you really need some of this to sink in. It's about behavior change. It takes a while to have – you kind of go through the experience, but the participants that leave, you might have a maize processor kind of leaving, or someone who is running an input supply store kind of walking away, and three days later, as they're doing business, they're like, "Ah, we now are realizing." Kind of the penny drops or the light bulb goes off where we see now we're realizing how this – what the lesson is. We're realizing like how this applies to our space.

So this is something you don't want to push too quickly. It's interesting. Actually, Ashwini Sendek has said, "What are some of the times spent to get the simulation piece together?" And it's interesting. Because every time that we start something into a very new sector, it takes several months. It can even take half a year of putting something together, figuring out what the messaging is, testing it. But after that, when we've got a basic structure, when we're adopting that for new contexts, it can be much quicker. And so something that can happen in several weeks where you can kind of do adaptations to different places. Obviously, then, still needing to test and adapt again.

But the key is really to break through to the core. And which is why we're very pleased to be able to work closely with Mike Field in adapting some of the simulations. We've done a lot of – as EcoVentures International, we've done a lot of simulations. A lot of it has been direct business trainings. You're training entrepreneurs on how to run sort of farming as a business, and agricultural business more, or improving their business, or how to write sort of business plans to access loans, or whatever it might be. So we've done a lot of that.

But we really had to get to kind of what's the breakthrough for putting this into more of a market systems context? And we started with the part that Annah was speaking about, which was really focusing on the input supply side, and have more recently moved into the processing buyer side. And we're also currently actually developing something that – this is sort of another brainchild of Mike Field, and that he's going to be using in Bangladesh – is working with implementing partners, other sort of development practitioners, on how to understand market simulation, and how to understand how markets work, and what is the implication of some of our development subsidies, or whatever it might be, and that.

So that's a very exciting piece for us. Just a development of this. And Kristin, thank you. I think Kristin shared – if you're not reading the chat, she says from her she participated in Uganda, in one of the initial tests, actually, in the Uganda materials, and she said testing matters so much, and who is doing the testing, kind of be able to see all the various pieces. And I think, for example, since Kristin participated in materials in Uganda, they probably sort of like I don't know ten different levels of adaptation, and different things that have happened, which is really exciting.

But yeah. It's really, really, really critical. I'm going to hand it over to Annah. Annah, I'm wondering if you can share with us, as kind of some of our closing thoughts, some of your experiences in using these types of methodologies, and how you think that they are applicable in different contexts. How might these apply to other people's programs? What have you learned by becoming more involved in simulation methodologies? What do you feel now compared to several years ago, before you connected into this space?

*Annah Macharia:* Thank you, Margie. What I would say is that this is new, and very innovative way of training people, or training businesses. Very different from how, for example, Technoserve has done it in the past. There's a great desire to move away from those traditional practices. Not that they have not worked. But there's a greater desire to see more impactful changes, quicker changes, quicker changes as well. So I would say that in Kenya there's a lot of interest to work differently from the methodologies that have been used in the past – both with farmers, and of course with the retailers.

So I would highly recommend a simulation training. Thinking about it, very quickly, businesses are able to confirm these are the investment – to confirm their understanding and confirm the investments they want to make to improve how they serve their customers, following the training…also be an eye-opener for us, to be able to think about like how can we improve on the training methodologies that we are currently using at Technoserve.

So just in summary, just to say, yeah, we are excited about this. Excited about this simulation training. It's of quite a lot of interest not just to Technoserve, but also thinking about all these agent change agents that we've involved. Reputable management marketing management firms that are confirming interest. It's a proof that this is exciting, and something worth investing in. Thank you, Margie.

*Margie Brand:* Great. Thanks, Annah. And maybe I'll just address one of the two more questions here and kind of round out with what is the key takeaways from this message. One of the questions that Matthew Dickard has asked is – do participants in the simulation actually take on roles that are outside of their traditional roles? And, Matthew, this is actually really key. Is that people are standing in the shoes of other players in the marketplace. So that they can start seeing how different people operate in different ways? And sometimes that actually means simulating those roles. Sometimes it means exploring and discussing what they may have done differently, or why actors were talking in a particular way.

So that's an important piece. Again, sort of as a key takeaway, and I refer to Ashwini Sendek's question, sort of on sort of what are the key takeaways from some of the cases, specifically? I think for us the key is to come back to what we're exploring here are more effective tools or what we see as very effective tools to actually influence behavior change. And I think the key takeaway is the need to change behaviors, and not only focus on information giving skillsets, attaining new skillsets, or new mindsets, but really changing behavior. And it's when we start understanding and exploring in our own programs – what are the behaviors we really want to change to strengthen that market system – that we're actually getting to something powerful.

And simulations, we found, happen to be a particular example of an effective way to do this. I'm sure there are many other examples. And any real life experience is always useful. But the understanding the challenge, understanding the behavior that needs to change, is particularly critical. And, again, being able to ask questions about not only the behaviors that needed change, and the message, but this is why we really are focused in, honed in on some of those cases. Who are the appropriate actors to pass that message on? And then what kind of tools are useful in terms of being able to be used?

Because it's not only what message can be passed on, but people often do need tools. So I think those four questions that we put in the beginning are really key takeaways for us. Understanding it's about changing behaviors, understanding who to pass that message on, and what are appropriate tools.

So with that, I think we've got to the end of our discussions. And we just wanted to thank everyone for being part of us. I know Mike Field, again, apologizes for not being on. He actually was hoping he'd feel well enough to listen in and be able to contribute, but he hasn't been able to do that. So we wish him a speedy recovery, and also want to really recognize and thank him for his vision in being able to recognize how some of this can be used in different ways in the field. And I also want to thank Annah for being with us in Washington DC.

Both of us are presenting in different ways at the SEEP Network conference next week. So you'll be able to learn a lot more in depth about some of the various work that's going to be presented from a bit of a different perspective at the SEED Network conference. So thank you, everybody.

*Kristin O'Planick* Thank you, Margie. Thank you, Annah. This has been a great presentation. As I noted before, I was very fortunate to get to participate in one of the testing runs in Uganda with the ag-inputs activity, and it definitely was a powerful experience, even just during the testing. So here are two things I want to throw out to you that maybe you can think about and respond to in our post-event resources.

Given that testing run, I felt like it was not only a good practice to do the – to get the simulation right for the target participants, but I felt like it was a good learning for the project team as well, as to some of the things that were coming out in the way that the market was operating. For example, there we realized very quickly that the consequences to the bad behavior weren't harsh enough. Which actually is what the project team is realizing within the broader market. And now their focus for the next year is to figure out how to make consequences to counterfeiting behavior, for example, with inputs stronger.

But that was something the simulation showed the team as well. So I wonder – could this actually be a tool as a way to do initial market analysis? At least on specific parts of the market. If you had a variety of participants from that market, giving input as they do kind of a testing of the simulation, as to, "No, no, that's not how this operates," or, "No, finance isn't like this," or – maybe that would be another tool to help us do initial learning when we're setting up activities on the ground. Something to think about. I would love to know your thoughts.

And then the second piece is something that Margie you touched on a little bit, but I want to drive it home a little bit more. I think every impact evaluation or randomized control trial that I have read last year about training shows it makes no difference in behavior. But that's traditional training approaches. So I feel there's an urgency for USAID and other donors to really push our partners to step away from traditional training methods, which are showing repeatedly in these sort of gold standard evaluations that they're not having an impact with adult learners in particular.

So this is something where I think simulations and experiential learning are critical and can make a big difference in our effectiveness. And I think we saw that early on with our life in the village simulation, which is available on Agrilinks. I think Joy will share the link in the chat box. Which is a different kind of simulation, but also very powerful tool that I've seen play out with multiple audience. So if you haven't seen or heard about that, I encourage you to check it out. But thank you so much for the presentation. Look forward to hearing the discussion on these methodologies

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