



Agriculture Sector Council Day Break Seminar

East Africa Dairy: A Shared Smallholder, Business and Government Partnership

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Participants

Introduction: Beth Dunford, Bureau for Food Security, USAID

Moderator: Zachary Baquet, USAID

Speakers: Moses Nyabila, Heifer International

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United States Agency for International Development: Agriculture Office

Female:

Good morning. It's a pleasure to welcome all of you to USAID Bureau for Food Security's Agriculture Sector webinar. These discussions are critical because they bring together a diverse set of stakeholders to discuss and share best practices around a critical issue. Today, the issue is dairy in East Africa, a shared smallholder business and government partnership, and, as you all know, dairy is a critical value chain in East Africa that underpins the broader Feed the Future strategy, not only because it's critically important for nutrition, but it's also a very important source of income for smallholders. So, this helps us significantly contribute to our dual goals of reducing hunger and poverty. Feed the Future is focusing assistance on dairy in Rwanda, Kenya, Ethiopia and Malawi, and as well as the broader East Africa region, and so we are very much looking forward to hearing about the experiences of Heifer International, and determining what lessons we can learn to apply elsewhere.

Today, I have the honor of introducing our speaker, Mr. Moses Nyabila. Mr. Nyabila has been the regional director for Heifer International's East Africa Dairy Development Program since 2008. He has over 15 years experience in development and commercial sectors throughout eastern and southern Africa. Before joining Heifer International, Mr. Nyabila served briefly as marketing manager and investment consultant for East Africa with Parmalat SA. He also served as regional dairy trade specialist for Land O'Lakes International, founder and technical advisor to the Eastern and Southern Africa Dairy Association, marketing specialist for Land O'Lakes Uganda, business development manager for Brookside Dairy in Kenya, and area sales manager for Coca-Cola SABCO.

Mr. Nyabila has carried out several dairy industry studies, facilitated formulation sector strategies, helped with bilateral and multilateral trade negotiations, and organized industry conferences and events. He holds an Executive MBA from U.S. International University in Nairobi in collaboration with Columbia Business School, and a certificate in export development from CBI Netherlands, and a Bachelor degree in commerce and business administration and marketing from the University of Nairobi. It is my pleasure to introduce Mr. Nyabila. Thank you very much.

[Applause]

Male:

Thank you. Good morning, ladies and gentlemen. I just want to say that from my brief bio, I've been around in Africa for a while and – okay, I was born in Africa, and I want to say that the battle, we in Africa are fighting three things, and this was put to us a while back by the late _____ who said, "There are three things that we should always fight against. There's poverty, disease and ignorance," and the poverty, of course, food security and other things come in.

So, that's the battle that we've been fighting all along, and in this presentation I'll share with you where we are on that battle, and I want to say that from the onset, I think we are beginning to see the light at the end of the tunnel in Africa. If you've seen the past, you know, journalists have begun painting a different picture of Africa, so I think we are getting somewhere, and that's what I want to share with you.

Okay. Briefly, my presentation will be about five things. I'll introduce Heifer International and dairy in Africa, in general, EADD as a project. Our impacts, I'll share with you that, the challenges and opportunities, and partnerships for EADD, too, and I'll just do a brief summary after that. Briefly, about Heifer International, our goals in Heifer International, again, comes back to the three things I was talking about: fighting hunger, peace, we are looking at equity and shared resources, and you can see from the mission all the way we work with communities, and we've been doing this for the past 65 years, affecting close to 13 million families in 121 countries. So, really, what we are talking about is we've been doing this but we've been doing it in small ways in smaller communities, and we want to expand this to more, because the challenge is actually much bigger than what we've been in the past. So, really, this is an opportunity to share with you how to upscale what we've been doing.

Why livestock and why dairy? This is something really significant. I want to say livestock is an integral part of smallholder systems that is practiced all over Africa and most of the developing world, so really this is a way of life in many parts of the world in which we operate. It's a common means of livelihood and critical to food safety. I think that's critical, and it's vital to ecosystems of smallholder systems, and, of course, it meets the rise in demand for animal protein, which is something that – against the background of opportunity with urbanization and other things happening in different parts of Africa.

Why East Africa? East Africa is really the cradle of dairy and livestock in Africa. Over 70 percent of dairy animals in Africa reside in East Africa, so that's where the opportunity really is. If you look at the lands of East Africa, it's suited for dairy. I think there is a gentleman who visited from Nestle who said that perhaps East Africa is the best place for dairy animals in the world. So, I think, for those that have visited the islands in Kenya and Ethiopia and Uganda will agree with me in that. So, really, there is a big opportunity there. Urbanization is happening. Close to 40 percent of Africans will be living in urban areas in the next few years, in the next ten years or so. It's already over 30 percent, and it's growing rapidly, so all these people in urban areas will need to be fed and, therefore, the rural communities where there's livestock, they have to take advantage of those opportunities. So, I think that's really critical, and Heifer has

many years of experience in this area, so that's critical.

In terms of EADD, as a brief introduction, you can see from the scope, EADD _____ started in 2008 _____ 2012. It's a big project funded by the Bill and Melinda Gates Foundation, and you can see the amounts we are looking at, affecting a significant part of the population, 179,000 people, about 1 million people in total, covering three countries, and you can see the partners going all the way. We have management of about 170 people, against, of course, 179,000 farmers and 1 million people, so it's a lot of work out there. Our vision really is to transform the livelihoods of the 179,000 people in ten years, so 179,000 families, 1 million people, and to do that we are looking at three objectives. We are looking at impacting productivity, we are looking at knowledge and information, very critical, and we are looking at market access, and I'll be sharing with you what progress we've made in those aspects.

In terms of strategic focus, you can see public/private partnerships is really critical for us, and this local control tailored implementation. This is not a one-size-fit-all. All the countries, all the communities are treated as very unique in their own right, and a lot of processes begin from the farmers and build all the way to the top. So, again, I'll be sharing with you what we've done in that respect. It's very critical, and we are looking at expanding, and one thing I've really seen, the social capital, there are a number of things that are beginning to happen there that are really causing transformation, so I'll share with you that again in later slides. In terms of how we get things done, there are about three things that we do that are really critical. One, we mobilize farmers into communities, into energized people that are ready to invest.

A lot of times, people say there's poverty and, therefore, people don't have resources, but, really, when you mobilize these people and they face one direction in terms of how they look at their challenges and opportunities, you'll find again they are able to put in resources that really make a difference in their lives. So, that's really critical, mobilizing communities is critical, and then, once they're mobilized, they form producer companies, and those producer companies then set up the infrastructure that is needed to deliver the services, to deliver to the markets, and to build the infrastructure that is required to really get them where they want to go. So, that's really critical, and then our role as staff of EADD is to play the invisible hand, which is really about providing technical assistance, and working with those communities to solve their problems. So, that approach is really critical, and we do this in a very sustainable way, so that's critical.

In terms of how this gets done, like I said, we start with communities and

families, which are then built into village groups, usually groups of 20. Those groups of 20 then come and form what we call the dairy hub, the Dairy Farmer Business Association, which, in Kenya, typically would be about 3,000 to 5,000 people, and then it's the hub now that begins radiating all the services that you see. So, these are really critical building blocks, and then, of course, negotiating with buyers. So, this is really the building block of the EADD hub model. Again, how it looks like, finally you see, you have the hub in the middle, and you have all the services that farmers need, all connected in either Kenya shillings, Rwanda's franc, or Uganda shillings flowing from one to the other. And I think this is really critical because if you find, for example, the hub generating close to, say, something like 25 million Kenya shillings, if that money finds its way around before it goes back to Nairobi, for example, you find then it's a lot more than the 25 million, so that's the multiplied effect, so this is really critical for the survival of smallholder systems out there.

So, again, smallholder farmer cannot on their own afford a veterinarian, cannot afford the kind of services that they need out there. Now, if they do it on their own, then, of course, _____ not afford them, and all the vets end up in the cities, and, therefore, nothing happens in the rural areas. If they combine forces and they form a hub with about 6,000 members, you find now there's critical mass for all the players to come in, and really this is what has been very critical, and you find banks and others beginning to go to the rural areas, so I think that has been a big revelation in what we've been doing out there.

In terms of what we've achieved, we did mid-term evaluation, and you can see what we've achieved. The mid-term evaluators, this is in the _____. This is _____ International. They said EADD is on target for achieving its milestones. There's synergy. We are in a team of five consortium partners in three countries. We usually say within a year _____ it has about 1,250 moving parts, but I think we've managed to make it work. Many people were really skeptical when we started, and we've made it work, so this is critical, and in terms of livelihoods, we've made some progress, and I'll share with you some numbers. And farmers really are beginning to have access to technologies that are beginning to really make a difference, make a dent on poverty, so I think that's critical, and we are very much gender balanced – women, youth are really critical to the growth of Africa, so very critical.

In terms of, again, these headline numbers, we are working on this, but we've seen some impact. The mid-term evaluation looked at productivities, and it is growing in two years. This is significant, especially when you're talking about 100,000 farmers. If you're talking one farmer, the difference is minimal, and if you meet _____ your farmers, they'll tell you, "We've doubled our production.

We've tripled our production." But as averages, of course, we are talking, you know, the different percentages, and you can see the changes that we've seen out there. In terms of – let me see. We're looking at about 22 percent in Kenya. In Rwanda, we are looking at about 26 percent, and we are looking at about 200 percent change in Uganda. Now, if you combine that with the change in price that farmers are beginning to enjoy, for those that have been to informal markets in Nairobi to buy something, you'll know that if you go and you don't bargain for something in Nairobi, you'll buy it at twice the price.

So, information really is critical, and when farmers act on their own, they get about one-third of the price. When they work together, they double the price. They manage to get double the price. _____, you can see where we were. We are looking at about 12 shillings in Kenya. We were looking at about 151 _____ franc, and look at the changes, and you can see what that does when you combine the difference in productivity and price, and really this is table price, which aids investment and other things, so this is really critical. Again, we are really investigating these numbers and looking at them, but, from the headline, it seems like a lot of progress have been made. Again, we are talking this last three years.

In terms of where have we seen the most impact in summary, I must say before we started, a lot of farmers in those communities were really disenfranchised. They didn't have bank accounts, a number of them. In fact, 90 percent of them didn't have bank accounts. They were very much operating on their own. They were administering antibiotics on their own on their livestock. They were their own vets; they were operating on their own, and the productivities were very low, under five liters per cow. Three years down the road, you can see the difference that we have made, together with the farmers – 142,000 farmers are now mobilized into very active communities that are making a difference out there in the rural areas. Sixty-eight farmer cooperatives and companies have been formed, and these are very vital vehicles for many parts of the world where there are no companies that have been registered there before.

So, really, you have to picture this for you to really get it; these were enterprises that were nonexistent there, and any of these enterprises, when you look at the multiplier table, you find there are many, many enterprises around that one 68. Perhaps you have to multiply it by about seven to know how many enterprises around there, and each of those hubs, with about sometimes 50 transporters – young people transporting – it's a lot bigger than what you're seeing on this screen. So, this is critical, and farmers have earned about \$24 million since we started, and the prices, again, in terms of comparing retail price of milk and how much the processes are _____, you can see there's a major shift from just

under a quarter to one-third. In some places, it's about half the retail price, so you can see the bargaining power of farmers is really beginning to work, and when you compare this to farmers that are not organized in a system like this, the difference is huge, so this is really critical. And from farmers who could not raise any money and were thought to be too poor, they've invested close to \$5 million. This is in terms of savings and how much money they put in their enterprises, so there's a big difference, and women are really playing a role in this, and you can see _____.

So, this is the pictorial. I think this is _____ capturing the different aspects that we've seen out there. This is Tanykina. There is a village called Kipkaren. They now have what I think is a big privilege in the U.S. now. You're talking about medical. They're funding it on their own, and about 2,000 of 6,000 members are already members of an insurance _____ that gives them up to 100,000 shillings when they get sick, and they can be admitted, and whatnot. Making a big difference, and this is something that's beginning again to spread to all the other places. You can see in Uganda is a company called Kiboga West, and with 1,500 members doing about 8,000 liters to 10,000 liters. Again, significant progress in those different villages, and you can see these are really jewels of success and forming the building blocks for the next Africa, and, as I share with you, about \$24 million in total. This, again, baby steps but really significant in terms of where Africa moves from here, especially rural Africa. Very critical.

All this happening, good things, there are challenges out there. There are three big challenges that we're looking at. Water is really critical, and feed. A cow is a factory. A typical African cow during dry season just gets one-fifth or less of 200 liters of water they need per day. Now, when that happens, there's no milk, and when there's no milk, there's no dairy business. So, really, this is critical. Resolving this problem, again, around the issue of climate change is really critical. Infrastructure, we know this, and we are trying to look for solutions, and farmers have indicated that they're willing to put in some shillings, some francs for later towards maintenance of rural roads, so this is critical. All they need is partnerships. _____ is generally a slow adoption of technologies. We have to really find a way to really make _____ work for Africa. I mean you can't feed a city of 5 to 10 million using _____. It doesn't work. So, it doesn't work here, it doesn't work in Africa, and we have to start finding ways of bringing in technologies that will really make a big difference.

We'll be looking at Phase 2 of our project, and we are looking at perhaps bringing in close to 300,000 more families, when you add to the already 179,000 farmers. So, we'll be looking at about a half a million families, which is about

just under 3 million people, and that will come under EADD 2, which is 2012 to 2017, covering five countries, and we are looking for partners, and that's part of why we are doing this presentation today. In terms of how we move with this forward, we believe in partnership and we are looking at different partners, from public sector to banks and companies, and all these providing embedded services, and you can see this is what we call the shared burden, so that's really critical for EADD 2.

In summary, I want to say we've seen a lot of things happen out there. They have model, which is the basis of EADD, really works, and in EADD we've got the people, we've got the systems; we've got the partnerships that are required to really go to the next level, and we've got momentum and there's actually return on investments. We are beginning to actually see output, how many millions of shillings going to farmers, and how much we're investing. I'm sure in development, that is still a challenge. In private sector, usually it's straight, Pierre will tell you. You need 10 percent return on investment or 20 percent. In development, the numbers are a little fuzzy, but I think in EADD we are beginning to correct that, so that's really critical.

Scale is important. Again, we have 800 million Africans. We are only currently impacting just about 1 million of them. So, if we have a system that works for this 1 million and there are 800 million other Africans that need it, I think we owe it to them that, if we have something that works, we can replicate it. So, I think that's really critical. _____ initiatives are critical. It's really not about bringing in technologies and other things from the rest of the world without tailoring them to the needs and aspirations of locals. So, again, it's got to be led by local communities, and I think we really have the opportunity to tackle the three things that we are looking at in Africa that are posing the most challenge: hunger, disease and ignorance. And I want to say the public/private partnerships is really the way to go, so that's really critical.

In closing, I just want to say some big thank you's. It's not always that Americans are thanked, but I want to thank the people of America for all the support you've given Africans for many years, and in Heifer International we have from schoolchildren to people who, themselves, are actually poor contributors, and that's the same. I'm sure USAID is also made up of poor people who are contributing to help other people who are perhaps a little poorer than they are. So, I want to really appreciate the support you've given, and I want to say for those that feel like the support has reached a point where it's not working, there was a miner in Tanzania who was digging gold. He mined. He dug and dug and dug and dug. Finally, he reached a point he said, "This thing is not working," so he abandoned the mine and left. Somebody else

came and, with one stroke, he got gold.

So, I think that's where we are in Africa right now. We are at the tipping point. So, for those that are getting a little fatigued, I think this is the time you just need a small effort and we are there, and I'm sure all of the media in the U.S. is beginning to tell you that Africa is actually the next place. So, that's really critical, and I also want to thank the Bill and Melinda Gates Foundation for the faith they've put in Africans, and for really being brave to invest resources. It's not every day that billionaires want to put these resources to help other people, so I want to appreciate that. _____ governments, private sector people, Nestle, _____; there are a lot of people that have really come and rallied around this idea to really make a difference. I want to say thank you, and I want to do this on behalf, not of myself, the 1 million smallholder farmers with whom we work out there, and the 800 million Africans who are part of this _____. I want to say thank you and, for the listeners, I think you've been very good listeners. I also want to say thank you, and there's no better way to do it than to get the beneficiaries to just cheer you. Thank you.

[Applause]

So, I have my colleagues here, Dr. Sahr Lebbie and Pierre Ferrari. I think, if you have any questions, we'll form a partnership of three to respond to them. Thank you.

Male: Okay. We're going to be doing sort of a mix of in-person and then online participants. We have about 80 people online listening in on the conversation, as well. So, when you ask a question, please state your name and your organization and then your question, and we'll get started.

Audience: Bill Fiebig from Africare. Who's been providing you with assistance in business planning? I mean I'm really glad to see the global bureaus recognizing animals are so important. If you talk about assets in an African household, it's animals. A maize crop can fail; animals will head up on the high ground when they see a flood coming. But, anyway, in order to make money in dairy, you need a business plan, and I'm wondering who's been helping you and your organizations do this business planning, and, if it's documented, it would be really good to hear that.

Male: Okay.

Male: _____ one question, one answer, so do you want to answer the question?

Male: Okay. Within the EADD consortium, we've got Heifer _____, we've got TechnoServe, we've got ABS, and we got _____, so all of them specializing in different aspects. In terms of business planning, TechnoServe has the expertise. Of course, we all have expertise. I'm ex-Coke. Different people are looking at that aspect, and that's really critical. All our planning actually begin with a business plan, then it grows to everything else, so that's –

Audience: [Inaudible comment].

Male: Yes?

Audience: [Inaudible comment].

Male: It's what are the enabling conditions that you're seeing that are allowing your organizations to actually develop a business plan that _____ at the end of the day is profitable? Given the costs and the benefits, I mean what –

Male: Yeah.

Male: – yeah.

Male: Okay. Pierre, do you want to take that?

Male: This is Pierre Ferrari with Heifer. I think you're asking an interesting question. I'll tell you a little anecdote. I was in Kenya about four or five months ago, and we visited one of the chilling plants, which is a central business investments that the farmers are asked to do. Yes, there's a little bit of help in terms of preparing an overall business plan, but what we've discovered across the large majority of these farmers is that they have an innate business understanding, and we met with the board of directors of this particular chilling plant, and the financial arrangement, the balance sheet that we created was equity from Heifer, some equity from the farmers, and then some bank loans. So, it was about 10 percent from the farmers, 60 percent from us, and the balance, 30 percent, from the banks, and we had to sort of cajole the banks to get in there because they see smallholder farmers as a terrible risk.

So, I walk in there and I've got an MBA, and we're all trained in business, and we're the major shareholder, and we walked into the room. The chairman of the board, who is a farmer, began having a discussion about how to convert our equity into convertible debentures. The vocabulary, the understanding, the depth, the quickness with which they learn how to manage the business structures is one of the great enablers, so I think you've got to find the right leaders within the community, but it's there. I think we may make the

assumption it's not there, they need the training, they need the handholding; they don't, or most of them don't. The rapidity with which they understood the cashflows and how quickly they could repay and create the savings within the community was just fascinating, absolutely fascinating.

Audience:

My name is Tracy Gerstle and I work with CARE. Sort of building a little bit on this question, because that was my question, is who is managing these institutions, and then getting into it, as well, how is the governance working, because that's often the challenge, quite frankly, with co-ops. And so I'm wondering what sort of safeguards or things are in place?

Male:

Well, governance is absolutely critical, and I cannot say that is something that has been solved, but we look at about five critical things out there. We rank the companies in Stage 1 to Stage 5, looking at different aspects that includes governance. In terms of where we are, you'll find a number of companies in Stage 4, so they've tackled the issues of governance, but I want to say that that's something that we're really emphasizing, right from elections of board members from down up, from the villages up to the board level. Again, what we are also doing in governance, other than the elections, the transparency of it all, and we work with them to make sure that they hold their AGMs and whatnot on time and they disclose all that they need to disclose, and that we use the accounting standards. The cooperative acts have the different stipulations, so we make sure that they adhere to that, and not just us. We make sure that the members, the members of the cooperatives hold their boards accountable. So, that's happening, and we've seen from different elections, if you don't perform well, you're kicked out.

Now, the other thing that we do is training on corporate governance, and all the board members go through the training under that. So, really, that's what we are doing. It's still an area of challenge because, again, in a rural environment, you'll find some are ex-teachers – you know, you don't have a lot of ex-CEOs. So, what we are beginning to really do is once they've constituted their boards that have been elected democratically, we are encouraging them to have at least two independent directors who are brought in for their skill. So, if the skill sets you have, "This was a headmaster, this was that, this was that," then we say, "Okay," we work with them to identify the core skills that are missing, and usually you find that's in areas of accounts, in areas of legal, and they've been actually bringing in what we call those external directors to really complement that.

So, I think they are building within the system what they'll really need to govern themselves when we are not there, and that's really the aim, is to make sure

they have the structures and they have the things that will be sustainable in future, and governance is really at the center of this, but it's still a big area of challenge. There are a lot of creative people out there, just like they're here in the U.S.

Male: Can I add one more thing to a very important question, and this is applied for Heifer. But I think it really has value in terms of the development process. We have been working for six decades in small self-help groups, and we gather families of 12 or 18 farmers, and we go through a very extensive what we call value space holistic community development. That individual unit, those self-help groups, and we call them dairy management groups – there's all sorts of different names – that unit, where there's a great deal of collaboration and participatory understanding of what will help the community is a foundation for better democratic processes, more caring for communities, and understanding that a single behavior has on the whole system. In conversation with Bill and Melinda Gates Foundation, we've actually emphasized how important the investment is in these smallholder, or self-help groups. I can't emphasize how important it is to have that preliminary work. If we don't do that preliminary foundational work, a lot of the structure that we build on top of that just basically fragments. That's our learning, and we've actually got data to show that that works. The communities with which we have done more foundational work are clearly, quantitatively more successful than the ones where we have not done as much work, and it's the softer side of development but it's fundamental.

Male: We have a question from online.

Audience: Yes. This question is from Sam Goff at Food for the Hungry. "Thank you for your excellent presentation. What accounts for the difference between Uganda's change in dairy income, 754 percent, versus Kenya, 300 percent, and Rwanda, 200 percent?"

Male: What accounts for the difference is really productivities. In Kenya, the smallholder system has been there for a while, and the difference – so, when it comes to really where does the _____ dollar have the most impact, it is in Uganda and Rwanda compared to Kenya, simply because of the different development stage at which the dairy industries were. So, that has been critical. Again, in Uganda, we are working with smaller groups. In Kenya, the typical cooperative has about 6,000 members. In Uganda, it's about between 500 and 1,000. So, the smaller groups, again, you'll find it's easier to impact them faster. Again, I think the biggest price increment has been in Uganda. When we came in, the farmers were getting about 100 shillings per liter; now,

they're getting about 400. So, the difference already, when you combine the change in productivity and change in price, it's more significant than it is in Kenya.

Male: One more from online.

Audience: Okay. Yeah, this is sort of along the same lines. This is from Bulan Bular at _____ System International. "Kenya's milk prices have been extremely volatile. What steps are taken to protect farmers from extreme price fluctuations and being at the mercy and demands of the processor _____ such as New KCC and Brookside?"

Male: Good question. Again, farmers are most vulnerable when they're on their own. When you have 6,000 farmers trying to negotiate with you, you take them more seriously, and what's been happening – we've been working with processors, really, to change their approach to things. Typically, they've taken the hunting and gathering methodology, and you don't do any development out there; you only gather the milk you can get. Now, processors are beginning to actually work with farmers to grow productivity, to work with them on areas of investment, working with them to get banks to give them loans. Now, you don't get banks to give farmers loans when you know the following day you're paying them nothing for their milk. So, really, those commitments are coming in the form of the agreements they have with farmers, the agreements they have with banks, so there's a _____ of different people who are beginning to look at this, and really, where the biggest difference has been is farmers consolidating all their milk and then bringing them every year to negotiate saying, "Okay, we've invited so-and-so, we've invited so-and-so," and actually they have almost an auction system.

So, really, I think that's really where the real thing is, but I think processors are changing. Brookside, KCC, all of them, are beginning to change simply because they need to change, and, if they don't change, of course, other people will take over, and farmers have shown them that, "If you don't pay us the right price for our milk, we'll invest in processing plants," and that's beginning to happen out there. So, the partnership now is the bargaining power is with the farmers, and that's where the difference has been most.

Male: I think another critical thing is actually working with all the groups right from the beginning, and that's what EADD has done. It's not only working with the farmers, but we have the processors and the bankers on the table, so we are partners in this development, and that's one point. The second point is that there is competition, and since the farmers have, they have a right to decide

where they want to go, that also will definitely make the processors know that they have to work with the farmers or they have to somehow come to an agreement as to how to continue. We also have another strategy we have adopted. They are operating on contractual basis. Each of the cooperatives is given the freedom to negotiate and have contract with the processors, and they can change their mind after one year if the processor is not behaving, because there are other processors they can go to. In fact, so much so that some of the chilling plants, some of the cooperatives who are producing very large amounts, like, for example, _____ and Tanykina that are doing 35,000 liters a day are actually supplying to the _____ processors, and that is their decision _____ of the board. That's not a _____ of Heifer, and that's very critical. Sorry. My name is Sahr Lebbie. I am the vice president for the Africa Area program in Heifer.

Audience:

Thank you. My name is Brian Greenberg and I'm with InterAction, and I really enjoyed the presentation. Wanted to ask a question about the public/private partnership and how that works, and what the public sector is actually delivering, and, more specifically, I want to ask if you have a mechanism for linking some of the associations together in an apex body or with representation drawn from those associations to advocate on behalf of their interests with, presumably, local and regional government. And so, how that works and actually what services or what policies are being provided, and how responsive governments have been in that. The private sector relationships come across clearly in the presentation, and that's really interesting to see, and I'm curious about how you're building that capability into the associations in terms of the work they do.

It's not just a producer association. It has to be a business and networking association, as well, and they have to identify their interests and needs and take those to government. And then, just very quickly, I'm interested in steps the association is maybe taking to make better use of other livestock products which often go to waste, and I'm thinking of the composting possibilities – manure and urine from stall feeding, if there's cut-and-carry or if you're feeding them in other ways, and how those are being recycled into the farm system, and if there are horizontal connections with perhaps other sectors of the ag economy crop producers to work together on those issues, as well as advocacy with government.

Male:

Yeah. I mean if you saw the shared burden pie chart I showed, there's a big role for governments, especially when it comes to the infrastructure – roads, electricity – and the governments have been very responsive. As to whether we do it ourselves or the farmers do it, actually the farmers do it, and we've been

working closely with the boards. They've been writing letters. I know of a particular place in _____, they wrote letters to the MP, and we have constituency development funds. They've cleared; they've done all the roads. So, I'm seeing that is beginning to happen, but we're just at the very beginning. In Rwanda, working very closely with _____ to do mass inseminations. Again, we've seen actually the last two years they've invested close to \$500,000.00 to really support what we are doing out there, and they are working closely with the farmer cooperatives.

In terms of how they are consolidating their efforts to really work together to bargain with governments, we are seeing apex organizations being formed. There is already a federation of companies in Kenya connecting all the 21 cooperatives we are working with, and that is under formation now and they begin _____ for different things. In Rwanda, there are unions that are forming in different sectors connecting different cooperatives, again, working with the local government, sector governments on roads and other things. So, we are seeing traction beginning but, again, we are just on the third year of implementation. So, in future, I see that really moving forward. In terms of the other things, Sahr, can you _____ –

Male:

Sahr Lebbie again. I want to go back to the issue of the involvement of governments. I want to emphasize that, in fact, we have received more response from the government since we have started EADD than we have before. In Rwanda, for example, the government has already decided to put in 70 chilling plants. When we started, we were only thinking of 7 chilling plants. The government has now gone ahead, using the same model, and wants to put in 70 chilling plants. It's ambitious, but at least that shows that they do recognize that there is _____ and there is opportunity, and, therefore, they are doing that. They have also invested very heavily in the cooperatives. The strategy we adopted from the beginning was for the farmers to have an equity of 10 percent, and Heifer, we give them, through the project, 30 percent, and they take from the bank 60 percent.

In all the countries, we have realized farmers are able to raise more than 10 percent. Some of them have decided to raise up to 20, 30 percent because they don't want to take too much loan from the banks. But, in Rwanda, the government is actually injecting 40 percent into the business, so that's huge, although that messed up our strategy, but that's what you get when you work with government. That's the things you learn. There's the good, there's the bad; it's how to chart those waters and make sure that you still remain working with them while achieving your objective. That's critical. You've got to be innovative, and we are working on that.

In terms of utilization of the byproducts, for example, we are now integrating biogas to utilize the manure, and that is very good for us because then the farmers have a way of managing the waste so that they don't become nuances in the communities in which they are working. They can manage the waste and also get the opportunity of reducing how much firewood they use for cooking, and this is going hand in hand with increasing the number of fuel-efficiency stoves so that if even they use firewood, they use only small quantities of firewood, and they also have _____ that is being produced from the biogas. That's one _____ we are doing, but we are also, of course, teaching them to reduce fertilizer and use more of manure in growing their kitchen gardens and, also, their crops around their houses. So, that's one way we are using, and, of course, the crop residues, getting their crop residues and feeding this in the formulations that we have told them for making dairy feed.

Male: I think just the final aspect of that is we are beginning to work with different partners – Sargento, Nestle and others – who are looking at crops, looking at maize, for example, areas around _____ storage, so that's really critical because, again, these farmers, many of them are already maize farmers, and if their whole entire crop is lost due to a _____, again, that's a big problem. So, we are seeing that happening, and, really, the hub is not about just dairy. It starts off with dairy, but then it looks at all the aspects of what the farmer does. If you go to _____ stores, you'll find seeds, you'll find fertilizer, so it's a mechanism for every other thing that the farmer is doing out there, so it's just a big platform. I think I invite you to come and see what happens out there.

Male: I think your question was how do we get the private sector. As Moses said, the practice of hunting, running after milk from house to house, from village to village, we have made the processors know and the bankers know that they don't have to do that because we have platforms that hold about 30,000 dairy farmers, 6,000 dairy farmers, and for them it is easier for them _____ use that as an entry point, using the hub as an entry point instead of dealing with individual farmers. That cuts down their cost of business. Now, when we started, the banks were running away from us. I was very happy when my CEO was with me. The banks are running after us now, and that's critical.

Male: We have a question from online.

Audience: Yes. We have several questions, actually, involving gender and women. Kathy Colverson from University of Florida, and Christian Pennotti from CARE both want to know, "Can you talk about the strategies used to encourage the

increase in women's leadership promoting gender equality and women's empowerment in the dairy sector?"

Male:

Yeah. About 70 percent of the work in dairy is actually done by women out there in the villages. So, you cannot do dairy development without working with women and the young people, so we've recognized that. So, most of the training is really focusing on the women, the persons who are actually running the dairy enterprise. So, we make sure that that happens, but it also starts with us. At least 30 percent of our staff in country with the partners, threshold of 30 percent for women. That gives us a challenge in terms of recruitment, but we wait to get the right women, and we are doing that without exception. Now, this is beginning to go into the boards. The boards now have allocated, some of them 20, some of them 30 percent to women.

Again, that's beginning to happen, so we are seeing a lot of transformation, and everyone begins asking if there are no women in the women, why isn't there women in the room, so they've put some thresholds. That allows women to come in, and then, once they start appreciating the role of women, we think there will be more women participating. But, again, in the dairy management groups, the groups of 20, a lot of them are controlled by women simply because they are the ones who are available. So, we have an electoral system that starts from down up. I think we'll have more and more women transitioning to higher and higher levels, so very critical. We recognized that early on, and we really emphasize the role of women, and train them and work with them.

Male:

We have time for one more question.

Audience:

My name is _____. As you mentioned in your presentation that one of the critical things is with the animal feed _____. I am _____ your experience between the competition between animal feed and human feed, because most of the small farmer want to use their _____ for their own feed instead of the animal feed. So, we are still on the – I mean the big challenge is for the dairy _____ because you cannot do some _____ to _____ more productivity. Thank you.

Male:

Absolutely. It's a big area of challenge. There is no contesting that. Again, increasingly what we are doing, using technologies, introducing technologies, like _____. What farmers are doing is crop residues, and all that. They convert them in time into _____ and they keep them. So, instead of wasting them, instead of allowing them to dry too much out there, they consolidate and keep. So, that's really the first level of defense. They make sure they use residues which is not the actual food, so that's beginning to happen. They also

recognize the fact that they have small lands, and, therefore, if they use it for feed, they'll not have food. So, recognizing that, they are beginning to contract outside farmers to get them feed, and they are doing this at the hub level. The hub actually does what we call a feed audit, and they know what they're missing, what _____ work with them. So, once they've identified and they know the number of farmers, they then come up with the strategies to see how to address that, and they know the length of dry season.

So, again, we are just at the very beginning of this, so they contract large farmers out there to plant for them hay and other things, so we are beginning to see some traction in that end, and when we combine that with water, I think that's what will make the biggest difference in terms of productivity. So, it's an area of challenge. We are beginning to see some light at the end of the tunnel. With mechanization, really, I think one thing that is really critical for feed is mechanization. With climate change now, you have only a small window. If you don't get all your feed resources in time, pulverize it, keep it properly, you will not have enough feed for dry season. So, mechanization is really one of the key things, and we are beginning to work with suppliers of equipment to just get them to work with farmers at the hub level and address that issue of feed, but it's an area of challenge.

Male:

I just wanted to add, other than the crop residues, in most of the areas where we are working, during the rainy season there is a lot of grass, there's a lot of forage, which goes to waste. So, what the communities are doing now, what the boards are doing is actually encouraging their farmers to harvest most of this grass that is going to waste, and through using pulverizers, getting it ready and _____ so that they can intervene during the dry season. Another thing we have also done is actually encouraging farmers themselves to grow grass. Most of our feed for our animals today is actually more grass than grain, because we are aware of the competition between man and grain, so we are really pushing to integrate forage plants, especially legumes for its plants, into grass, _____ the farmers can at least get three to five liters of increase in milk production without putting grain.