



# Enhancing Livestock Resilience and Pastoral Livelihoods in Africa

Q & A transcript

May 17, 2012

**Presenters:**

John McPeak  
Syracuse University

**Sponsor**

United States Agency for International Development

*Female:* Great, thank you John. If all three of our presenters want to come up to the front in case there are a variety of questions for everyone and we'll get rid of this podium so that everyone can see. Do we have any questions for John or any discussion topics that will get you back here? And also, please state your name and organization.

*Audience:* Juan Bootari, AID. You mentioned that milk is the greatest priority to improve the incomes of these people. What is the biggest constraint regarding milk? If you had resources to address the milk constraint, how would you use those resources? And a related question – I think you mentioned that besides pastoralism, these people engage in a number of other activities like trade and so on. Do you think the best \_\_\_\_\_ to allocate these resources, milk or pastoralist related activities or to the other activities outside of pastoralism might offer greatest potential for income improvement? You know, what would you say?

*Male:* Okay. With milk, in the pastoral system, the two biggest constraints would probably be like, mastitis – they have a lot of tick build up so you have lots of udder damage. So you don't always have full production. That's more in the mountain, though, right? Especially as you get up into the highlands. You get more of the ticks and the mastitis. Another part of it is just the spatial aspect. Where you have a lot of milk is where you're in the extensive rangeland where the people aren't. So there is a balance between people are where there aren't many rangelands. Milk is where there is a lot of rangeland. And trying to make that connection is difficult. I think, though, that one of the things that was mentioned earlier, I think the fodder production offers a way to start solving those problems, where you would have a designated milk herd in these peri-urban areas that would be fed these fodders and would be producing milk for the towns. I guess one other problem with the milk markets is the quality control is so bad that you know, we did some studies of the – just the quality of the milk samples that were on offer in Uniceolo and Morali and Marcevit and it was pretty horrific that – you know, I wouldn't drink that stuff if it wasn't boiled. In the rangelands you can. When you're out in the remote areas, you know, it's safe. But something about – it gets in all those containers and they walk it in and they mix it together and it gets – quality control would be an issue.

*Audience:* [Inaudible]

*Male:* Very little of the other activities that I know about was project supported. These are people opening their own shops and a lot of the other activities was – in some ways, it was a family member, like the educated family member and the herding family member. “You stay in town and then, herder, brother; you take my animals and go out there.” So it really was people having small shops and fixing tires and doing all those little niche things in the economy. I don't think the project had that much impact on – you know, there is the map-making. The mission does that and some of the jewelry making, supported by the missions but I think that's very small compared to what people do getting remittances from relatives in Kenya to run a shop in town. I don't know. Does that match what you would see or what do you think?

*Male:* John, you're right. I mean, this has to start with the people. And can they do it? These people are not born business people. But they are learning. So what John is saying is they try small things that they can do and they don't put a lot of money in something they can't manage. And I talked before, if it's only a livestock, where do they put their money? In their pockets? It's gone. So they won't like to do it unless they have to. But, with these banks and the financial business coming up, the message is clear. You are not losing the money. Keep it somewhere safe. In the bank. Not in your pocket. Restock when things improve. Or decide what you can do with the money. So the options are slowly expanding, but they're still limited, let me say that.

*Male:* One final – the big return is livestock trading. The people who have big capital, they're making big money on livestock trading. But it's – there's this disconnect is the microfinance one which it really is macro finance. You need to buy a Lori. You need a huge amount of capital to buy a herd and take it to Nairobi. But those are the people, I think, who are making – I mean, if there's big money being made, that's where it is.

*Male:* Maybe I can come back a little bit on the milk, the dairy aspects. I think there's a lot that can be done. Strategic feeding of dairy animals, feeding of the young animals to make sure, mineral supplementation, vitamin supplementation – there's a lot of different activities. But again, it's very complex and all the factors have to be in place to be successful.

*Audience:*

Jim Yazman, from USAID. So on milk markets, I'm real concerned about that. Wouldn't it be better to convert that milk into marketable animals rather than trying to, number one, improve horrible quality milk? I mean, you're never going to meet any health standards. And number two, you're really not going to have the kinds of forage resources you need for consistent milk supply that would attract some kind of capital investment to make a real milk market. So I think we – as an animal scientist, I would look at the system and say your off take, your primary product is weaned animals that go into either for fat lean or for slaughter.

*Male:*

See, at the moment, I have two thoughts on milk marketing. One reason we might want to focus on milk marketing is generally controlled by women and it is a resources that it gets money in the hands of women that most livestock markets won't. The markets are pretty rudimentary. You know, Northhore, where I've worked, the price has not budged for a liter of milk since I first went in 1997. It's the land that supply and demand forgot. So the market is actually just really rudimentary and it could become more developed but it's just local. It has no link outside of the town. So it is really just townspeople buying from the herds. There have been projects that have improved the quality. In Morali and Carrera, other places, they did – they had machines that came in. The women brought it in. It had to be inspected when it came in. They put it in plastic sashes. I think the idea had merit. I think the management was a problem. Would that be a fair assessment of why that didn't work? And I do know that camel milk – the camel milk coming from Somali side, they actually got that much more integrated now as I understand it. Because it used to come down in jerry cans on top of the buses but they've got it into the metal cans now and you can buy camel milk in East lee that's actually pretty good quality. Is that?

*Male:*

Yeah, both of that. John is right. I mean, quality of milk from pastoral areas is understandably very poor. Let's face it, they survive on that milk. We talked about nutrition, how the kids are living out with those camels for two weeks surviving with that milk. So their cousins will have no problem taking that milk. They survived on it on their own. But I see the two levels here you're talking about. And even that poor milk has value. When it gets to Islee, a liter of milk in Islee is four or five times a liter of cow milk. It's prized. It's rare. So there's room to actually make money out of that. Good or bad, there's value here for

this milk. But let's look at the camel milk enterprise who have a problem for a long, long time because the camels are staying way, way away from the water sources. So hygiene is a challenge. And in my younger days, we tried hiring the best scientist, looked how to improve the quality and keeping the quality of milk from pastoral areas. We agree hygiene is a challenge and especially for camel milk but John says that women survive in selling camel milk. And I say the value of the camel is the animal for the future. So there's some challenge here how to improve the quality of milk coming from those camels wherever they are, because they have to be there, way, way from centers and where the water is. We have a small kind of trial coming up. A women group is asking for much in grants to assist them. They are buying eight camels and we are happy to do this and we track those camels. We track to see whether they can actually improve the way they milk, the way they keep them and the way they transport milk to their town. That's a good challenge to try to be with them and see how we can do it. But believe the aluminum cans are not fading. Because the way they transport the milk on top of trucks, plastic cans tied with ropes in picking up trucks. Aluminum cans won't hold the lid. We have to come up with technology. Thank you.

*Audience:* But there is an issue that those jerry cans, there's a health hazard as those break down.

*Male:* Exactly.

*Audience:* So we need to do something.

*Male:* That is the major problem I was trying to say. Those plastic cans are very difficult to clean. They have a handle that's hollow. And the bacteria's will hide in there for a long time. So we have to come with technology that has no hiding spaces for bacteria. \_\_\_ to do that. But that's the only conduct to be capped nicely tight and hung on top of a pickup. For now.

*Audience:* Patricia Bonnard, a consultant in agriculture and food security. I wanted to ask a question about the insurance scheme, if I could. If you could give, pretty briefly, how does that insurance scheme work? Because there's a variety of

insurance schemes that are being introduced to east Africa. And then you mentioned that there's some issues with extending it out further and getting acceptance for the schemes and I wonder if you could just comment on what some of the resistance might be. And maybe it's not resistance, it's just not knowing. Whatever that is.

*Male:*

Okay. So what we had available to Kenya, the Arid Lands Resource Management Program, had been collecting mortality data. So we were able to get a pretty good record, noisy data, but good noisy data, about mortality in a bunch of different sites. From NDVI, you can download this from the web and it's like every 10 days, every 8 by 8 block in northern Kenya, you can get those numbers I was showing. So what we did is we just started regressing mortality on NDVI and figured out what regression estimation predicts mortality best. So that's our index. When we say the index that's the nature of the index. And then what we did is we actually tested that index using the prima data and these two independent data sources, pretty good prediction. So what we do now is we are predicting based on NDVI mortality. And when you are buying an insurance, you buy insurance against the index, crossing a threshold. All right? So the threshold is 15 percent mortality. So there's a co-pay of 15 percent. Uninsured risk of 15 percent. Once you past 15 percent, you're covered for every percent that it goes by one 15 percent. This is something they buy. It costs about six percent of the value of the animal. You insure for a year. You buy the commercial contract before the start of the rainy season and if at the end of the rainy season the threshold is past, it's announced, someone comes and pays you. Alright? Particularly, this works well when we're linked up with the hunger safety net project which has got all these point of sale devices on all these cards recording who's who, where we can actually get the money to someone's bank account instantaneously. It's hard when you have to drive around in a Land Cruiser trying to find herders, but if you have to, you have to.

We just had our first pay out in March of this year. Our numbers were highest in our first offering, in our first offering year and a half ago and then it dropped off and it stayed kind of steady. What I want to figure out is did the numbers drop off – okay, so here's a design flaw potentially. The drought had already started eating into people buying power. Could they not afford the insurance just when they needed to buy it most? Did they become discouraged that they bought it and it wasn't a great year and they weren't compensated, so they said, "This thing's not worth it"? Did the insurance company realize it was a drought and they were likely to have to make lots of payouts and maybe not as

aggressively marketed? All right, so that's a potential. Or also, as is always the case in northern Kenya, there's politics and there are politicians who have been campaigning on livestock insurance and there are spoilers who are opposed to and there's probably five other hypothesis out there but it's an ongoing research project. We're trying to figure out. But we just had a group go up to talk to the people who bought it, explain to them what happened, explain why some people were compensated, others weren't, why they were. I think with enough education and persistence, this thing has legs. It's not going to solve everything but I love the idea of people – if they want it, buy it. If they don't want it, they don't buy it. If it works, it works. And it's a private sector once we subsidize and get the research and development, it could work. But we're not there yet. We're still working on it. But you know, we could expand out. Right now, we're just in Marcevit. It's expanding to southern Ethiopia. Chris Barret and his team have just started up in southern Ethiopia.

*Audience:*

I enjoyed reading your book as I still think I said to you. And one of the things I've learned from the book and I've learned from your presentation and I learned from the CNFA presentations is the importance of the commercialization of livestock to improving economic resilience, et cetera, et cetera. I guess the question is, given the complexity of the system, given the risk in the system, how do you go about doing that? And one of the other things you said – and Peter Liddle also said – is that projects have actually had more detrimental effects than constructive effects. So you're sitting with two project implementers and the real question is, if projects – and Peter Liddle in particular is talking about how projects have largely done what he calls bad diversification as opposed to good diversification, if that's the case with projects, what do you think projects should be doing? What kinds of things should they be doing or how should they be doing them in order to be more effective?

*Male:*

With the livestock markets, I think with more coordination, the markets could function better and I think the Kenya livestock marketing council and some of the district councils, when they were getting integrated, I thought that was useful. Some of our research showed that when you have an auction, producer prices go up five to ten percent compared to the Diotec negotiations. If we can organize auctions, if we can organize market days with auctions – because right now you have this system there. There's no – like the west African system would well define market day. Everybody knows that's the day to go there. They bring their livestock. Sagunda Miramar has a market day but Marcevit doesn't have a market day. And you also end up, because of that, livestock

prices, it's high in Nairobi, that's announced. Everybody kind of goes out, buys up livestock, all rushes to Nairobi and crashes the price. If you could coordinate – so if this is the market day over here in Wajeer, here's Gareesas, here's Marcevits, you can actually have some kind of regular flow so you wouldn't have just this massive animals one day and no animals the next. That's avoidable with coordination. That said, coordination in livestock markets has been elusive and challenging. GT Zed, you were trying to organize the auctions in Morali repeatedly and there are saboteurs who don't want that to happen. It's not in their interest for that to happen. And we have had a hard time getting past that, I think.

As far as alternative income generation, a few things that struck me. The hides and skins processing can be done better than it and it can be made much higher value. I remember the core example from the IVP project. They were getting, what, five to ten shillings for the low-grade ones? And they were doing the salt tanning and you could get up to 40, 50 shilling? Yes. Something like that. So you know, it's a small training but you can train people to do better hides and skins. It's not going to change the world, but it makes things a little bit better. If the milk marketing, if you can make that more effective and more hygienic, that would impact people.

The aloe – they had the aloe going but they ran into Seatez, didn't they? Have we gotten around that problem yet or do we still have that problem?

*Male:* It's expensive to get seed for aloe and the plants are more expensive.

*Male:* But they were forbidden to trade it because the –

*Male:* It's protected by law.

*Male:* It's protected by an endangered species so that was another one of those woops. Yeah.

*Male:*

Can I make a short statement on bad diversification? I'm not an expert on this and I respect Peter Liddle but I think his observation was valid and I said sometimes projects – and I'm not talking about donor projects. Even government is really a big culprit here. Centralization is a very bad diversification concept because usually, the people never consulted. They're central, but law, by force. Or giving out chunk areas for sugar – and I give you an example. There was rice – a project on my slide – that was way before our project went there. What we are saying is we do the best with the situation that we \_ in because we'll not be able to reverse it. The people have gone to court. Sometimes they win. Sometimes they lose. In the case I'm talking about for the rice, they lost. So the rice is there to stay. We have to make the best use of the byproducts to feed the animals, which interestingly, is only one river crossed and most are die. But do not be alarmed if the rice came up harvesting because of damage the structures for the – water structures. So instead, we are talking about billing all that \_\_\_ and sitting across the river to save those dying animals and we can get bails and bails of straw after the rice is harvested.

The sugar program is coming up. Cane tops, molasses, \_\_\_\_, plenty of space to use this as fodder. And also room for the people living around those games to start small feed loads, activities. Ethiopia is a champion here. They never go big. Small enterprises, medium. But it's a lot of feed load activity in Ethiopia. I think we can learn something from there as well.

Marketing institutions, local institutions, sometimes we forget to build capacity. We come from the top, we never reach down. We are now working with a local institution, the Kenya Livestock Marketing Council. Extremely good choice. They have a national forecast, but they also represent other districts. This is a team that's now slowly taking over marketing policies at the count level. They cannot be better. And we trying – to be sure in the new developed system of government, that KLMC or DLMC members are represented. They represent the economy of those areas. So working with local organizations and strengthening them is also a huge plus. We also see they are the biggest or best linking institutions you can have. Their membership are the producers. Their membership are the processors. Their membership are the traders. The whole value chain, they are linked and they call in that. I can we can bring these together and brushanize the whole marketing operation.

When I got to Garaze I see 10,000 animals in that marketing yard. And they all have to be sold in one day. It's mind-boggling. But some way, it has evolved. It's still chaotic. But we have to do something about streamlining. But I think going, like John says, I'm saying we have to go through the auction one animal at a time. Remember, we bring fewer animals. One or two per person. It's going to take three, four, five days to go through 5,000. In their way, they do it in a few hours. And those animals are on trucks with hours heading to Nairobi. So there's things that are good and working. We have to be careful that we don't destroy that in the process.

*Male:* One value added opportunity that I think is still out there – the finishing and fattening. I don't think we've done enough with. I think the animals are just taken, they put on trucks, they're in Nairobi. We could a lot more with finishing and fattening and feed markets. I don't know if it's better to finish them in Marcevit or to buy some land down in Iciolo and fatten them up down there but we're not doing much with that and Ethiopia is, if you look at Nazareth –

*Male:* Yeah, John, you are right, you are right. And I keep on challenging government officers. In some years back in Kenya, we had very thriving feed low system. But it was high cost – huge cost. It was not private, it was government. And you know government is really inefficient. We have to privatize this. Like you say, John, we lose out a lot of value adding there. What happens – and I should have showed you a picture here – animals live in Garesa, selected for size, taken to the coast – I showed you where they float tighter ranches for two three months – those animals look hugely different. They put on weight, good condition, but where do they go? Put them on a ship to Moriches. The Moriches people are very smart. They put them on \_\_\_ and molasses for two months. They add more fat on them. Kill them and export to Spain. Product of Malesheis. Nobody ever heard of us in Kenya. We lose a lot.

*Audience:* Hi. Hi, Joyce. John Lewis, Terraca Local Capital. We had very – that's very reassuring – we had very similar data 35 years ago when I worked for Ilca in Mali. I did some of the same kind of survey work. And the answer on the local growth animals, including some low milk females but also low growth males was, "Sure, we'd love to bank them if you were running the bank but anything that the Mali government or Milan personnel who didn't have any rights and responsibilities with their particular clan, would not be acceptable." Because there was no feeling that the old chits system has it had been discussed even 10

years before that so, we're talking 45 years ago, the idea of a chits system somehow where you don't turn it into money, you turn it into capital. You turn it, basically, into an investment in savings account of some kind that would produce income and dividends that would be intelligently invested just like as if you put it with a money manager on Wall Street. And the idea was that if there was some trustworthy NGOs who you could operate the chits system as it was originally designed which is basically you have a picture of the animal and you go – you're always entitled to what it was worth the day you turned in the animal plus interest. But if you went in at a particular time with that animal and its sale characteristics had such and such a value and was greater than the original time you turned it in plus interest, then you would get that price. Meanwhile, the money would be with an institution and invested, producing dividends. And there was a lack of trust there. Well, since then – fast forward 35 years – a lot of these areas have very, very reliable micro finance institutions. I mean, microfinance has been a big rural development success in the interim, yet I don't see, and I may be wrong, any micro finance institutions in this meeting. I don't see that part of AID in this meeting. I don't see that part of AID Kenya necessarily talking to the food security part of AID Kenya. So my question is about not only in terms of research and the institutionalization research but also about development practitioners, about the siloing between these areas. I mean, clearly, well-placed micro financed institutions interfacing, which is what – with what is the rural banking system in semi-arid Africa. I think the time may have come. And I hope I'm wrong about who's in this room.

*Male:*

John will respond to that comment but I'll forget. Jim raised an important point and I was going to forget about this. Shouldn't we be focused on selling off the young animal from those areas? And Jim, you're right. Years back when I started working, we had a very effective system of moving young animals from northern Kenya. The range in land in northern Kenya's fantastic for producing young animals. John said, two farms of females so you can imagine every year or every two years there's a cow from that female. There's a lot of offspring coming out. So the plan was, bring all these younglings or two, three year olds to central Kenya to fill lots, to fill the ranches. That collapsed. It was a great idea and it still can work. And what we are seeing about \_\_\_ lots developing in high potential areas or even accepting animals to keep for two or three months to gain weight, that still should be the way. Because you cannot finish those animals in northern Kenya. It won't work. So good point John, Jim.

*Male:*

One on the banks. I did something else – I looked at a Kenya commercial bank back when it was the only bank and I figured out that if you had less than the equivalent of 20 sheep and goats in your account, it would be completely dissipated within three years by all the charges. So one reason why people don't put their money in banks is because their money disappears in banks. But then I even looked in – compared to keeping your money in livestock compared to what the bank was paying. Even losing 50 percent of your herd in a drought, you did better with the livestock in the long run than you did with the bank. Now, you're right, things are changing with micro financing, there's more competition, but going back to “Why don't people put their money in the banks as it was about 2000, 2002, well, that's why. It was a losing/losing proposition. The micro finance that was in Marcevit at the time of this project, it was not very successful, which is not to say that micro finance can't be successful, but a few things that were learned from the challenges of – Sharon Osterlow looked at this for her masters. That's part of our project. One, micro finance thrives best where there's lots of small market niches and opportunities where you need a little bit of money. You know, the proverbial, you need to buy the cell phone to rent out the cell phone. Doesn't work as well when you got a dispersed population with not all that much heterogene aiding the economy. So that was one of the constraints. The other is – and maybe this was a design flaw – they were selling shares. Your load was tied to the size of the shares you had. And the community really didn't grasp the idea that they should say no to some people. So they said yes to everybody and it was to say, “Hey, this money's coming from outside. Anybody want to borrow some?” and so there were just massive defaults. And where this was really kind of – well, troubling, is it ended up distributing money regressively. The poor people had shares that dropped in values that people that had lost of shares where the ones that took the loans. They defaulted. The value of the shares went down and these poor people who struggled to get two or three shares found the value of their shares declined. So it was kind of a combination of the design wasn't thought through all that well and the people didn't really understand how to manage this. With proper education, it could work. It's not to say that it is going to fail but it is particularly challenging and the model that this micro finance institution was using, worked in other parts of Kenya but really struggled up in northern Kenya. It did work a little bit better in Ethiopia. Like, Ling and Solomon were finding micro finance worked better for people setting up teashops and things like that. There are opportunities out there for things like that. But it faces challenges, so...

*Male:*

Micro finance and default rates. Pastoralists have perfected the art of defaulting. I take that back. What I'm saying is, they have challenges. Anytime

there's a drought and you've given out loan, what do you expect? But this is not about pastoralism. Even commercial ranches default. They lose animals, they default. Jim, what I'm telling you about the 70s and '80s. What happened? There was a huge drought in 1984 in Kenya. All the animals are \_\_\_ in EFC funded ranches died. So those ranches collapsed and they were not able to pay back their loans. So it's not about pastoral people defaulting because they want to but there are too many droughts. Now what we learned in the last two droughts, the few that had received loans did default. And all these were given through some credit guarantee. And they're not stupid. They know there's a – credit is granted so why do you struggle? The banks are not stupid. The money is granted so why do you struggle to collect? Good combination. I'm not saying that's perfect. It's not right. But I did talk – I think you missed it. We came up here late. We have come up with a financing scheme which we hope they'll be noted for because it's not our money. It's their money. We are system to form a cooperative or cycle type – I don't know why cycles are. They save their money in an institution where vast systems to create is committed to own and finance – not donor financed. We only support the process – the formation of this. But, the members, who are the people, will save money in this cycle. Sharia compliant, they save the money, they rule allows them to borrow for three times, what they save. So as long as you've saved, you borrow three times. You can be a small saver. You still get three times what you've saved, proportion to what you saved. So there's nothing like losing there. And you be guarantee by your own neighbors, your own member, friends, so there's no money lost in the system. This may work and I think it will and it's Sharia compliant. It's already been approved. The government is working on the structures. And this is the first time a Sharia compliant own managed – committed to manage – cooperative approach is being studied in Kenya. It's very innovative we think.

*Female:* John, our online audience is where they can get a copy of your book.

*Male:* I have it.

*[Laughter]*

*Male:* Well, Amazon.com has copies but Routledge – it's published by Routledge so if you go Routledge Taylor and Frances group, you can order it there. Routledge. R-O-U-T-L-E-D-G-E. So [www.r-o-u-t-l-e-d-g-ec.om](http://www.r-o-u-t-l-e-d-g-ec.om).

*Female:* Thank you.

*Male:* And you can pay John through M-pesa. M-pesa is a system that works very well in Kenya. It's great. It's innovative. It's mobile money transfer. I can send money to my work because Kilometers away; I don't have to go there. Just press two buttons, the money's transferred. The pastoralist are now using this money. Yes. You don't have to carry your cash to bank. \_\_\_ on your phone, receive on your phone, pay with your phone. Mobile money transfer. ITC's becoming very instrumental in new programming now. We want to catch that at the right time.

*Male:* Yeah, I will say from the Prima sample, we had no cell phones in their questions and then in the IBLE, we had like over 75 percent of our people have cell phone contacts in our survey database. In northern Kenya.

*Females:* Thank you so much to our panelists. Let's give them a quick round of applause. *[Applause]* If you have a chance to fill out the survey that was on your seat, that would be wonderful. It helps us shape future events. And a recording of this event will be on Agrilinks.org in about a week and we'll let you know what it's up there. Thank you.