Enhancing Livestock Resilience and Pastoral Livelihoods in Africa

Presentation transcript

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Before I introduce our final speaker this morning, I would like to give you a very brief background on the Global Livestock Discussion group. This is an informal coalition which we began, one of my late colleagues, back in 1995. And it has periodically gone on as this informal group, the purpose of which is to provide an opportunity to enhance communications around key livestock issues and opportunities, to share experiences and evidences of the work we've been doing. We want to build collaboration. It's a multi-stakeholder group. And to link practice to policy. The membership of the group, it's not formal, it's informal. There are no fees to come and join or anything. You just have to show up when you say you do. But the membership is drawn from research in academia from the NGO community, from livestock practitioner communities, from government agencies – US government, World Bank, other multi-lateral institutions, inter-governmental organizations and the private sector. So it's a very open type of group. The rules are that women are not supposed to be wearing high heels to the meetings and men need to take their ties off. That's how informal it is. But the whole idea is it's sharing. Communications sharing. And opening and “Let's talk outside of the box.”

The ultimate goal is this information sharing among the members so that we all can provide the enhanced leadership and the partnership and innovation on the priority livestock issues itself. This group meets periodically. We don't have a defined scheduled. We tried to do it. Nancy Morgan from the bank and myself, FAO bank, myself, we wanted to do it quarterly. Well, everybody is so busy. It's really, really been busy. So we do it when we can. We want to share the experience of member organizations in implementing our development projects worldwide. Where we meet depends on, usually, somewhere in the Washington environment but it could be – last time it was held at the World Bank. We've had it held at USAID just as a meeting place. We're open. We're receptive. We've had it at the FAO office here in Washington. I think that it could be a group, and it has been in the past, very well positioned to increase cross sectional and specific information exchanges. It's about talking to each other, not at each other. And we want to improve the public as well as private understanding about the contribution of livestock to economic growth as well as to the development of small holders. And I will say that with the Feed the Future strategy that we're working towards, we would also include the nutritional security of people and the value of animal source foods, but that's another story.
I would like to introduce Doctor John McPeak. He's currently the associate professor and vice chair the Department of Public Administration and International Affairs at the Maxwell School, Syracuse University. John teaches microeconomics and development economics at the graduate level. And after receiving his bachelor's degree from Saint Lawrence University where he spent a semester abroad in Kenya, he did spend three years as a Peace Corps volunteer in Senegal. So he's fluent in French, but today he will speak English. After Peace Corps he entered the graduate program in agricultural economics at the University of Wisconsin in Madison. We have some people from University, don't we? Yes, one at least here. Received both his masters and PhD from this program conducting field work in northern Kenya and this served as a basis for his dissertation. After his doctorate he took a post doc research associate position with Cornell University. Not a bad place. Anybody from Cornell? Yes? Ahh. And was assigned to work in Kenya with the Global Livestock Collaborative Research Support Program. GLCRSP. And that was through the Pastoral Risk Management Project. I won't say the acronym for that. After three years of fieldwork, this project then, he joined the faculty of Syracuse University. He is now also a principal investigator with the Adapting Livestock Systems to Climate Change – C-R-S-P CRSP. Or Livestock Climate Change CRSP. John?

*John McPeak*: Thank you. All right, today I will be presenting – book plug here – this is a book that Peter Liddle and Cheryl Dawson and I wrote. It was published last year by Routledge. There's some order forms here if you're interested. One interesting thing about the book project. The folder on my computer is optimistically titled *The Prima Synthesis Year*. I created the folder in 2006. It took longer than a year, all right? So it was released in 2012 or 2011 finally. So here we have Mount Suribachi. This will be familiar to Frances. He's driven by here. The thing is, there's sort of like three things we can think about. One, it's just beautiful. So northern Kenya, southern Ethiopia, it's just physically a very beautiful place to work. Another thing I thought about, the importance of keeping updated. This road is now tarmacked. So during my time it was not tarmacked. Now it's tarmacked all the way up to Lisom, that's correct. It's Demorlay now? Okay. Yeah, this is the intersection with the road from Wamba's coming in right here and this is the road headed up from Uccello to Morali. And the other thing I thought about being updated, during my time, my three years driving up and down this road, sometimes this was the safe place. If you can make it here, you'd made it through. Then other times, this was the dangerous place. If you got here, you had to be going 100, 120k to get through safely. But it was always, you need to keep updated. Things change. Pastoralism just doesn't stay the same. Northern Kenya doesn't just stay the
same, all right? So I'm going to talk a little bit about something that's very in depth from 2000 to 2002, but I'll also try to update a little at the end as well.

So there's really three projects going on here in the background. So the GLCRSP funded – did most of the research that I'm going to present today. So that's the Prima Project, the Pastoral Risk Management Project. The PI was Ling Topic and Cheryl Doss, Peter Liddle, Chris Bearer were the sort of three big academics and I was a post doc along with Michael Flesher and then Gitashu Gebrer and Solomon Augusta. We also have some bases AMA CRSP. I'm part of the Indexed Based Livestock Insurance Project and I'm going to present a little bit of our data from 2009, 2010 and 2011 to play out this scenario and give a little bit of an update at the very end. And the livestock and climate change CRSP is who I'm working with on another project in Senegal right now. And I'm actually flying out for Senegal Saturday to check out things there.

Key messages from our book. Risk is pervasive and multifaceted. Climate risk is the key problem faced, but it links to all these other dimensions. Despite considerable change, livestock are and will continue to be, the foundation for the economy – echoing some of what we heard earlier. Access to livestock combined with access to ways to earn cash is the most rewarding outcome. All right, so combining the cash economy with the livestock economy seems to be the most successful outcome. We need both. Diversification and education will allow people to build livelihood strategies, not directly reliant on livestock and livestock products. Some might be indirectly reliant. I'll explain that a little as we're going along.

The Prima repeat survey work. So we did a baseline in March 2000 and then we had 330 households randomly selected in 11 communities, 5 in Ethiopia and 6 in northern Kenya. We had other modules – sorry, quarterly surveys every 3 months. We went back and revisited these households over a two-year period. The area sampled was an administrative, a location or a kabelle, depending on which country we were in. Kabelle is the Ethiopian word. Other modules were fielded in between survey rounds. Mostly we're going to focus on this repeated survey though. The IBLE survey, the baseline and monitoring work that we'll look at near the end, that was launched in 2009, 2010 and 2011. Those are fielded in August. The 2011 data just came to me, I think, Monday. So it's hot off the presses and probably needs cleaning and certainly wrong. But that's roughly correct. Okay.
The Prima research site. So we're looking from Segunda Miramar – well, down here in Gambol, in the Baringo area, that's the furthest down. They we've got Sagunda Mirama coming up further north. Marksavit is where we have three sites, four sites, I'm sorry. Logologo, Deride Gambol, Cargey, Northhore, and then up here in Ethiopia, there's five more sites. You can see we're going up across the top. We have the mean NDVI, the remotes sans greenness. So we're going from Sagunda Mirimar which is about 600 millimeters of rainfall at a .42 all the way down to Northhore which is really, really, dry. We're in the Chalbi desert. Mean NDVI is .0 which is desert. Underneath it in parenthesis is the coefficient, a variation of NDVI so it's not just the mean, it's how variable NDVI is. And you can see there's almost kind of a curve that when you're up at the higher zone, you have less variation than somewhere in the middle where you have more variation. And then when it gets really dry you just don't have as much variation so there's kind of a pattern.

To give some sense of the people, we have some Barana in a picture, well, of the couple there. That's an Ethiopian Barana couple. Then we have some of the sort of adapted housing that's traditional housing mixed with settled in Cargey. You can see there's some little gift of the World Food Program metal tin things there so the Rendali have largely settled. Our next picture, our Ariel Samburu Rendali mixed dancing at a wedding. My wedding. And down at the bottom we have a picture, that's in Gambol, Baringo and that's like Kippya in the background but like in the Baringo basin. So you can see, we really go from high zone, high rainfall, low rainfall, back to high rainfall. All right, so...

Just to give you some sense of the risk over time here, just so we can see. We've got from 1999 to 2006. We've got the NDVI and then we've got the rainfall. One of the things – you know, when Frances was talking about the mobility patterns – I think this brings it across a little bit. When it's a drought, like 2000, all sites are bad, all right? But here in these other years, there's sort of variation. There's some sites bad, some sites good. That's when mobility works. If you can move, you can play that distance, those spatial differences. But a bad here, there's just no place to go. All right? So that's kind of the – mobility works up until it doesn't work.
NDVI – Normalized Deviation Vegetation Index. Remote based, satellite imagery that's telling you relative green when it's green, when it's not green.

Kenya, the same kind of story. If we dig into this, another message that comes out is rainfall and greenness are linked, but they're not as closely tied as I thought when I first started looking at these things. You can see the patterns don't quite as work out as exactly the same. Like for example, here, in 2006, according to NDVI there's no real rebound. According to the rainfall, there is a rebound. So there's some kinds of differences that I think we don't fully understand yet, which is what makes researchers happy because we get stuff to look at.

This is a graph looking at the number and reasons given for livestock deaths in Prima survey by round and there’s a few graphs like this floating around now. A couple of different projects, we’ve all kind of come to the same conclusion. This blue is drought loss, all right? Drought loss is the big loss, but it's short. It's June, September, December – that's it. That's the drought. All those livestock get wiped out. This is just the number of livestock dead. All right? Disease also is biggest during the drought. But then once the drought passes, disease pretty much becomes the main story, okay? But the covariant shock is this large shock early on.

We also ask the 11 communities monthly survey reports what covariant issues were happening. So 24 percent of months were identified as having security problems, 5 percent reported raids. Now, we're going to push this a little bit but raids are actually infrequent but they're scary, all right? So insecurity, when you're scared about things and then the actual raid is relatively infrequent. Insecurity drives a lot of this, okay? A lot of decision-making. 20 percent of the months we asked them about were identified as having widespread human health problems. 14 percent of months having widespread animal health problems and what you were mentioning about the quarantines, when they shut down the markets, 6 percent of months were having a quarantine where you couldn't sell animal. Well, you could sell animals. You just had to go to a different market. You'd have to leave the district.
Insecurity is more common than the actual raids and it has an impact on productions. Going back to this idea of the degradation, there's lots of no go areas, all right? So part of my dissertation research I looked at the stocking capacity from Frances Range Management Handbook and the GT's ad work, the aggregate livestock herd in Marsepic district has never been anywhere close to caring capacity. It's just they're not spread out properly. They're all clumped up around town. So there's only like five percent of the land that's degraded. It's this halo around town. So if we can get the people to spread out, you won't have any degradation problem.

Okay, for on raids, our sample of 336 households in the baseline, 27 percent had been raided at some time in the 1990s. And the median loss is, you know, not huge compared to the herd size we'll see but still significant. Okay. What time am I at now? Okay.

Prices for things they buy are higher during a drought, so prices go up for grains, sugar, tea during a drought. Mean decreases and variants increase in livestock producer prices. So not only does the price go down, the variability about that goes up during a drought, so they're facing both kinds of problems. Health problems go up during droughts. All right, so if we were looking at how many people were having diseases, you can see the diseases are all loaded up – well, not – the majority loaded up here at the start and then declined. The main – malaria's the main one, but again, that's self-diagnosed malaria which I'm always a little skeptical of if it actually is malaria. But it is significant up there. I'm going to skip over the climate information findings, but we have a paper about climate information.

Part of the mystery that we tried to delve into our book – all right, so here's the average TLU for Ethiopia over the same period per household. TLU – Tropical Livestock Unit. 250-kilogram live weight, 7 camel, 1 head of cattle, 10 goats, 11 sheep – did I get my goats and sheep backward? Something like that. All right, so you can see here's Ethiopia herd size. Here's Kenya's herd size. Pretty much the same. Now, let's look at incomes. Alright. Here is the Kenya income, hit by the drought, bounces back. Income is over here on this axis, TLU's on this axis. Look at the incomes for Ethiopia, all right? So given the relatively commensurable herd sizes, the Ethiopian's sample is really much worse off. So it's not just livestock, it's the ability to turn livestock into income that is part of what's going on here.
All right, so our livelihood groups. We tried to break up our sample into livelihood groups to get some kind of analytical traction here. We used the median value of household herd size per capita, which is 1.25 TLU which is not very big. When we first surveyed the households – so this is the March 2000 sample – we used the median value of cash income per capita per day, a very small .44 cents or .04 cents day about, in the household when we first surveyed them. And we divided the households into lower cash and higher cash. Of course, these are relative. So it's somewhat arbitrary, but it gives us some ability to look at our groups and try to get some patterns. All right, so we're going to have these groups: the lower herd, the higher herd, the lower cash, the higher cash. This is a group we end up calling “left out” all right? They've been left behind in some sense, that they're out of the livestock economy and they're out of the cash economy. All right, this is their mean income per person per day. This is the coefficient of variation in their income over all the times we looked at them. Now only are they worse off in terms of low income, highly vulnerable. Their income is bouncing around all over the place, all right, compared to these other groups. Alright?

These are the higher here/lower cash. This – if we're going to talk about pastoralism, traditional pastoralism, this is as close as we're going to get. The people who are not all that involved in the cash economy and the people who are having big herds. Over here, we have the higher cash and lower herds. These are the people who are kind of moving from pastoralism is what we call them. And down here, we have the combining group and they're the ones that are doing it best. They've got the lowest coefficient of variation of income and the highest mean income, okay?

When I'm talking about income, all right, we have cash income, but we also have total income. Total income is when I apply the cash value of all the milk consumed by these people to their income. When they slaughter an animal and eat the animal, that has cash value. So it's a full income measure as opposed to just the cash. Okay? And that, we'll see is important in a moment.

Here's a Lorenz curve for percent of total income, percent of TLU, percent of cash income. The Lorenz curve measures the percent of the population on the X-axis and a percent of the research controlled on the Y-axis. Often, it's
summarized by a Gini coefficient, if you've ever done that kind of stuff. I know you have. He was in my class. So the Gini coefficient for total income is .56, for cash income, .68, for livestock, .64. These are not equal societies. These are pretty high. Kenya's income for the country, I think is .56 for the Gini coefficient so this is sort of in line with the inequality of Kenya, overall.

The livelihood groups. Okay, the share of a sample in each category. By construction, these are going to be symmetric, but 29 percent fall in this bin. The left behind, 21 percent with the sticking with, 21 percent with the moving from and 29 percent is in the combining group. And I make them color coded just so we can keep track of them a little bit as we're going through the next slides, okay? So the blue is our left behind, the green's going to be our pastoral in the green pasture, red is moving from and I don't know, what's that? Purple? Something purplish in that corner. Doesn't quite translate. Okay, going back to another point that was made earlier, everything that's blue is livestock or livestock products. Number one message: this is milk. Milk is the big story. Alright? So if we can find ways to improve milk production and mastitis is a big problem up here. If we can do something to improve milk that's the main component of income. That's the largest story up here. Are we doing enough to improve milk production, to support milk production? It's generally something we don't pay that much attention to and I was astonished when I first put this together.

Slaughter's pretty small. Another thing to think about. Here's livestock sales. Livestock sales is a commensurable proportion all the way across. Every group is involved in livestock marketing. So if we want to do something to help these people, livestock marketing gets us access to every group's income at some level. Another piece of it, here is trade, salary or wage. Pretty small. Pretty big. That's this moving from group that's got these salaries or wage or trade in business. That's what makes them different. They're in the cash economy.

Last two things. Here's food aid, right? So food aid plays a part, but they're not living on food aid. They're just not part of the story. We'll see that even more graphically next. And finally, as Frances said, if you're going to turn them into cultivators, you're not helping them. That top little green piece? That's what they're getting from cultivations and that's over a two-year period. It's just – not enough rain. Now, we did go through a drought, but all right...
So mean – total income by round inclusive of and excluding food aid’s value. So the blue line is what they’re doing for themselves and the food aid is layered on top, so one, they are not surviving from food aid. If they were, they’d be dead, all right? It’s just not enough. Another message: food aid is not filling in the gaps, all right? It doesn’t come when incomes drop and stop when incomes go up. It does a little bit but it’s not anything like consumption smoothing, all right?

Okay, a little bit about these households. The average TLU per person – these are the ones left behind, these are the people moving from, these are the people sticking with and these are the people who are combining. The combining actually have the biggest herds, all right? Again, the milk story? People with herds have a lot more milk. These people don’t have much milk. Everybody is selling livestock, all right? Pretty much all the groups are selling livestock and it doesn’t seem to be all that much, well, you can see these guys are quite market involved given their herd sizes.

Household sizes – here’s another piece of our story – the poorest households are the biggest and those are generally the town based ones. So the people who are still moving actually have smaller house. The people with the big herds have smaller households in terms of number of members. Some of that may be people who are pastoralist or still somewhat nomadic, are sending household members to town to be having access to school and health centers so it looks like the households are bigger. Another thing that sort of surprised us, the female household heads. A third of households are headed by females, so that’s not – well, when you think of the age difference between husbands and wives, normally in a pastoral society, the husband waits until he has a big enough herd to support a family so he tends to be about 10 years older than his wife traditionally. So that’s not a part of the story. But there’s also some immigration. So we ask women – and it’s reported in the book – how did you become household head? How do you feel about it? What’s good about it? What’s bad about it? And so a lot of them did become head through their husband predeceasing them.

Another piece of the story that goes along with the milk story, these are majority female herds, all right? Two thirds to three quarter female. So that’s
one part of the story. Why don't they sell more animals? Livestock markets are for selling male animals generally. Not female animals. What do they have? Female animals. Why do you have female animals? To get milk. Their objective is to have milk. The herd structure shows that. All right, so when we're saying, "How come you don't sell more?" "I don't have that many males to sell." The market wants males. "Why don't you restock?" "Because the market doesn't sell females." And if there's a female for sale in the market, something's wrong with her, all right?

How did they get their herds? Inherited. Alright? Three quarters or more of their herd—we asked them and "Okay, tell me, your herd right now. Where did it come from? Did you inherit it? Did you buy it? Is it a gift, borrow? Where did it come from?" All right, so again, there's not a lot of market mediated restocking here. Why do you hold on to your herd? Because you inherit it. And this is your inheritance. This is your land, all right? If you lose this, you're done. So there is a real holding on to the land.

What I—have far too much up here. So the main thing I want to focus on here, this is cash. We're looking at the cash income per person, per day. And you can see these groups are very different in terms of the cash that they're getting. One thing I wanted to stress that again, jumped out, when I talked about livestock and livestock products is very important, okay, we tell them they need to diversify out of livestock. They're actually already diversified out of livestock. The main cash income from trade, business, wage and salary is higher than from livestock and livestock products. It's very unequally distributed, all right, so the mean and the median are going to tell us a different story. But, there is actually quite a bit of cash income coming from non-livestock sources already.

The patterns in education. The key story here, really, is this middle two rows, the red and the green row. This is the group that's moving from. They're the ones that are sending their kids to school, disproportionate to the rest of them. Here are the people that are sticking with, the 14 and the 19 percent. We have the percent of household members with any formal education and the percent of enrollable children enrolled. All right, so you can see their livelihood groups have different approaches to education. Okay?
All right, one part of our story, there's a spatial pattern in livelihood groups. Logologo, Northhore, Cargey, these are dry lands where cultivation is not possible. They've got the most of the higher cash/higher livestock combined group. These all got pretty decent market access, each one of those sites. Now we've got these places, and Gambol, Finchow in Ethiopia which are towns which going in, you would think would be the most wealthy. They've actually got the higher cash/lower livestock. These are the most vibrant towns. These are the biggest towns. They have a lot going on. Here is Karati and Wachile. It's pretty much an Ethiopia phenomenon to be in that traditional pastoral system, which is the green, lower cash/higher livestock. Alright, so those two sites, they're really not very market integrated, although Karati had the market shut down because they're right on that Somali/Barana frontier where there was a lot of conflict during this time.

And finally, there's Deride, Gambol, Didahara and Dilo. I put Dijet Gambol here because in later, they start to look like this with lower cash/lower livestock. They got hit in the drought pretty hard in 2000. I'm categorizing them based on March, 2000. We got a lot of people with neither animals nor access to the cash economy, all right, so spatial diversity is not destiny, but there are some patterns to what we're seeing in this.

Another part of the story, sort of reflecting what we heard earlier this morning, I found this graph – all right, so what we've got over here, this is the average cash income by site. Over here, we have the average amount per TLU that the households were getting and then we're going further from Nairobi as we go from... Gambol is an hour from the Karoo. Sagunda Miramar about two hours from the Karoo – well, three or four hours from Nairobi. Logologo, Cargey, Direde Gambol, Northhore, there's all the Kenya sites. Look what happens to the livestock price when we cross the border into Ethiopia. All right, so when we talk about making cross border trade work, that's why. I mean, it's not that the animals are fundamentally different across the border. It's that the rules are all screwed up. And the roads are screwed up. But they're getting marginally better. The other thing, too, is look at the cash economy. Where there's a lot of cash is where they're getting the most money for the livestock. There's something about the cash economy, also, is much more vibrant in those towns. So they're correlated at some level.
Total income by site and site characteristics. Again, if you have ever had the privilege to visit Cargey Kenya, you don’t walk out of Cargey thinking, “Wow, what a wealthy place.” Alright? But it is. It actually – it’s a desert town, really dusty, doesn’t look very promising, but it turns out to be the highest income site. They’ve only got 200 millimeters of rainfall per year and they end up with the highest income. Okay? And again, the story we saw earlier, that Kenya site’s really coming in above the Ethiopia sites. Now, Ethiopia has changed some since 2000 to 2002 so if we went back, we might see things a little bit better. It’d be worth funding more research.

Okay, the update that I said I would add. I was interested to see how our TLU per capita herd size is compared to in Prima, compared to what I’m finding with the IBLE project. All right so what we have here is 2000, 2001, 2002 – these are the Primas, okay? And then where I could, I linked it to the 2009, 2010, 2011 IBLE data. All right? And the places we can trace – here’s Cargey. All right, they’re starting out about 7 or 8 TLU per capita and they got hit pretty hard in this 2011 drought. All right, here’s another place, Boobeesa. These are both no cultivation possible. They got hit pretty hard. In our study area, they had a drought – we had losses in 1999, 2000, 2004, 2005, 2009, 2010 and then this 2011 hit. One thing though, if they’ve been hit that frequently and they were still up here going into 2011, there’s some resiliency going on here because they’ve been hit by a series of droughts, all right? And they were still hanging in pretty good up till 2010 and then this 2011 drops. But they’re still at five TLU per person. 4.5 is kind of the threshold we use in academics for mobility. Here we have Northhore turning into Elgade, all right? Northhore, all right, they’re down, but they’re not out. So I guess I had the expectation things would look much worse than they did given how much they’ve been hit by droughts recently. And then you can see these sites, they actually – they were affected by the drought, but not quite as critically as the other ones.

So just a quick plug. Our Indexed Based Livestock Insurance – we’re trying to use the NDVI readings to develop an insurance product. This is from our monitoring and evaluation. But we’re out there selling commercial livestock insurance where you can self-insure by buying this product. It’s a pilot. It’s not perfect yet. We’ve got a lot of extension left to do but it is trying to develop a financial product that herders could use to insure themselves.
Okay, key message overall. Livestock and livestock products continue to be the foundation of the economy. Improving livestock marketing has the potential to have the broadest impact for improving cash income. Milk is the largest contributor for all groups. Improving milk productivity has the most potential for having the broadest impact on improving total income. And I think it's been under researched at some level. We really haven't done as much on milk as we probably could. And the Milk Matters publication sort of stresses that as well, if you come across that. There's already significant diversification out of livestock production systems, especially seen in the generation of cash income. So we don't need to tell them, “Hey, guys, you should think about diversifying your incomes.” They know that. They're trying. They need more opportunities, all right? There's spatial differences and access to markets in education. They need to be recognized and addressed if possible. All of the secondary education in our entire sample is in one site. Logologo. Where the African inland church was taking students and sending them to secondary school. But there's pretty much no other University graduates at all except for that one site.

Market integrated diversified pastoralism is more successful within diversification out of pastoralism. So that combining group was the best off. They're changing pastoralism to make it more market oriented, all right? So I think to the extent we can do that, we should support that. If people are diversifying out, that's fine, too, all right? We need to find ways to make that more rewarding.

Diversification is happening. Poverty in pastoral areas is different concept than pastoral poverty. So that's one of the things we've been – this is an aerial based sample. Instead of doing a sample of pastoralist, this is a sample of people living in an area where there are a lot of pastoralist. So the poverty is often the people who are not pastoralists, all right? So that's another thing we keep in mind. And another thing we see, when we're working in Gambol, a lot of the poor were actually Turkana who fell out of pastoralism and have drifted down to work on the irrigation schemes. So in some ways, Gambol looks worse than it would because it has this influx because it has irrigation.

Alright. My pictures. So this is sort of what you were talking about where you have one son who goes to school and one son who takes care of the herd. These are – that's actually one of our numerators and his brother. So the kind of combination of livestock in town. We have the livestock grazing right there in
town. Then some of the auctions, the markets – those are the kind of markets where we talk about improving and my final figure, here is Cargey. And our goat is wondering, “What, are you kidding me?” So, but it is. Alright.

[Applause]