

Julie MacCartee: Good afternoon, everyone. This is Julie MacCartee, Knowledge Management Specialist with the USAID Bureau for Food Security, and we're about to get started with our closing webinar for the AgExchange on aligning US government research investments to the US government global food security strategy. I'm just going to give a quick intro to the webinar room for those of you who have joined, then I'll be passing it off to our speakers.

So first I just wanted to let you know that the chat box is your main way of communicating today so please do introduce yourself, let us know where you're joining from. And also you're welcome to ask questions throughout the event using the chat box, and we'll be pausing at two points for Q&A.

I also just wanted to point out on the left side of your screen you can download the PowerPoint that you'll see today. And also in the little links box on the left side of your screen, you'll see in the middle there there's a link to a survey. For those of you who joined at the AgExchange, we would be very grateful if you would fill out that survey and help us improve future AgExchange discussions and let us know if you'd like to stay in touch regarding the development of the research strategy under the GFSS.

Alright. So we have a lot to get to today so I'm going to go ahead and pass the mike over to the chair of BIFAD Brady Deaton, who will be moderating this event today. Brady, I'll pass it to you.

Brady Deaton: Julie, thank you. Thank you very much and hello everyone. You're tuning in to the wrap up session for AgExchange as Julie indicated, aligning research and investments for the global food security strategy. I'm Brady Deaton, Chair of BIFAD and I really welcome all of you to this closing webinar. The last three days has seen an incredibly rich discussion, probably surprised many as it did me in its depth and breadth of coverage. We had over 400 registered participants from 35 countries and total of over 800 comments made across the discussion threads. And that's really outstanding with some of them tremendously in-depth with a lot of reference material being provided as well.

So I want to thank everyone who participated in the exchange and also to thank the organizers, especially those who facilitated the sessions, for the time and participation and the amazing job that you have done.

The final session will be live audio for the next hour and a half and it's designed to summarize the key take aways from the

AgExchange. I'll be introducing Rob Bertram, Chief Scientist of the Bureau for Food Security for some opening comments, and then we'll hear short summaries of the four themes from four USAID presenters. Nora Lapitan will talk about _____ for focusing US government research investments. Nora is Director of the Research Division in the Office of Agriculture Research and Policy. The nutrition research opportunities will be presented by John Bowman, Program Area Lead for Nutrition and Safe Foods in the Office of Agriculture Research and Policy. Then Agricultural economic growth research opportunities will be presented by Jerry Glover, the Program Area Lead for Sustainable and Intensification in the Office of Agriculture Research and Policy. And then resilience research opportunities will be lead by Greg Collins, Director of the Center for Resilience.

After that, those both BIFAD members present today, Dr. Gabisa Ejeta, Pamela Anderson and Cary Fowler will offer some insights and reflections on their participation and the ideas they've been exposed to over the last three days.

Finally, we'll hear from Sheila Roquitte, Director of the Office of Agricultural Research and Policy, about next steps and the research strategy alignment process and how the input from the AgExchange will be used, and we'll hear that before we adjourn today.

I want to encourage participants to use the chat features that Julie just went over to ask questions or make comments and we'll be pausing a few times to read these aloud and reflect on them as we go forward.

With that, Rob, may I turn to you, Rob Bertram, Chief Scientist of Bureau for Food security, for some opening comments.

Robert Bertram:

I just want to add our vote of thanks and appreciation to Brady's comments. We really appreciate working with the BIFAD, Brady, along with Pamela Anderson, Gebisa Ejeta and Cary Fowler have all been active participants. And this really took my back, actually, to 2010 and 2011 when we similarly worked with BIFAD engaged the global research community to develop the Feed the Future research strategy, in which APLU, the Association of Public and Land Grant Universities, played a very important part. And it also struck me that I think we had close to 400 participants, which is about the same number of participants we had in the series of meetings and such that we did back in 2010 and 2011. So it's great

to see that we've again reached a large community that spans the globe.

I think that research strategy was part of an overall transformation in how we approached food security and the challenges of solving extreme poverty, reducing hunger and improving nutrition and to feed the future. In a sense last year when Congress, by huge margin, passed the Global Food Security Act, I think we got in a sense of a vote of endorsement from our leaders on Capitol Hill and in the Executive Branch. The strategy that's going to be developed for the research this time is going to build significantly, I think, on the strategy we had under Feed the Future. That strategy, I think we discussed it the other day so I won't repeat the key parts of it, but the main difference being that this time we have a new framework that adds, as we spoke about over the last few days, resilience and an expanded understanding of nutrition.

So this week's AgExchange was again a way to update our thinking, to draw from all the partners and others who have been part of the last six or seven years of work under the Feed the Future research strategy, and translate that into a forward-looking approach for the Global Food Security Strategy and the Global Food Security Act.

A lot of things haven't changed. We've learned a lot. I think we've been refining things all along and we'll continue our whole of government approach. We'll continue to partner in catalytic ways with the public and private sectors, the NGO sector both here in the United States but also around the world. And I think very importantly, we'll continue to focus on evidence-based approaches so that we can not only make strategic choices but then show that those choices are paying off in really strategic ways.

So thank you again to all of you and appreciate again the results that will come out of this. We look forward to that leading to research outputs that can really be picked up and run with by development partners all over the world, and certainly across the Global Food Security Act implementation. Thank you. Thanks, Brady.

Brady Deaton:

Thank you, Rob. And I believe we've going next to Nora Lapitan. Am I right? The research division chief. And she'll summarize the discussions on criteria for focusing relevant US government research investments.

Nora Lapitan:

Thank you, Brady. Welcome, everyone. This is Nora Lapitan. Thank you for joining us today. I want to thank all of you for contributing your thoughts and insights to the online exchanges in the past three days. So I'm going to summarize our main key take aways for the first session, which was on focusing research investment to address the key objectives of the Global Food Security Staff. Again just to remind you, those objectives include sustainable economic _____ growth, strengthening resilience and improving nutrition.

I would also like to thank my colleague Sirel Cahan and Lourdes Martinez who worked with me in following the conversation. In the back, there were note takers and we all had to gather all the insights that you have contributed.

So there were two main themes under this topic which you're looking at on the slide, and I will discuss them sequentially.

We had a very robust discussion under topic. And in the interest of time, I'll keep my comments at a high level and highlight ones that received a lot of attention, including our own.

So the first topic in this area was looking at the potential for technology adoption and scalability. So a lot of you said these are important considerations when choosing research investments. So one of the threads around this topic was the importance of establishing impact pathways. So envisioning not only the research output but also the dissemination pathway and how those techniques will reach _____.

It is also important to consider the opportunities in science within the context of where application of technologies matter the most. So here we need to consider not only the farmer constraints but also what triggers decision making for farmers to adopt a particular technology. Considers of the impact of technologies on male and female farmers is going to be very important.

So for example, asking ourselves will technology empower women farmers and resolve an equity and inclusiveness. In other words, we need to consider possible interventions and approaches from a systems perspective lens, taking into account the content within those systems.

So in GFSS, resilience is added as one of the objectives, and to address resilience it's important to consider risk alongside the consideration of investments in technology developments. And one

of the ways to do this is to connect the technology agenda with social protection investments.

The last topic that got a lot of attention is considering institutional capacity building to achieve sustained impact. So considering all the comments together, there were many more that I will not be able to discuss in five minutes.

But the main take away is this. That overall, we need to be strategic in prioritizing public investments and look for opportunities for private sector engagement.

So with regard to opportunities in science and research, our main key take aways have to do with research to help us understand what works in technology uptake and adoption. In other words, how can we better understand the dissemination pathways of technology? What make adoption of some technology successful and how can that information be shared?

So under this topic, two that I would like to highlight in terms of opportunity are big data and information sharing platforms. So while big data approaches have been used in data intensive disciplines such as genomics and sustainable intensification, the idea around this centered around using big data approaches to capture technology adoption trends and possibly emerging technology needs.

The other one is the use of model tools and approaches to capture technology needs and adoption. So for example, one that was mentioned was hyper-spectro imaging with or without remote sensing as a way to collect data on adoptions rates and scaling, particularly land area planted under new crops and technology.

Another interesting insight was to use crowd sourcing approaches to help reveal farmer Agra-ecological knowledge gaps and information, doing surveillance of present diseases and track and forecast yield trends. So these tools will help with monitoring and learning, which can inform decisions about strategic research investments.

So those are our key take aways and I welcome your questions and comments. I will now hand over the mike to John Bowman.

John Bowman:

Okay. Good afternoon, everybody. This is John, I'm with the Bureau for Food Security and I'm summarizing the nutrition session.

As you can see, we had six topics that were up for discussion. Dietary diversity, water and wash, food safety, nutrient-dense foods and partnerships, social behavioral change, communication and kind of the latest and greatest research innovation. We had close to 200 posts, and you can see that the posting was fairly well distributed over these topics. The research innovation one was the most popular.

I think an important take away here is if you look at the water and the wash, kind of a low participation level, this is kind of emblematic of a larger issue we have in that all the work we're doing in trying to build agriculture and nutrition linkages to get good nutrition outcome through agriculture, we're not really having a good interaction with the wash community.

And then topically across all the conversations we had throughout this session, there's general agreement that we need to highly reinforce social behavior communication change, dietary diversity and include more work on animal source foods.

In terms of a summary, I'm not going to have time to go over all the six topics. We essentially summarize by the fact that there were three cross cutting issues across all six. More work on multi-sectoral, uptake of the actual recommendation and then consumption patterns so I'm going to go through those three now. Next slide, please.

In terms of multi-sectoral approach to this problem, still a lot of feeling that our research trials in nutrition and health should be fully co-integrated with agricultural projects instead of just simple, coordinated co-location of projects. The co-location aspect is considered just to be weak and not enough. If we do cross-sectoral interventions, these are going to require a lot more time and patience initially but over the long haul we'll get a much more synergistic effect.

Also, we need to pay more attention to the area of the one health interface where human and animal health, environmental stewardship and natural resource management are deeply intertwined in terms of getting human nutrition outcomes and benefits. We found out that this agricultural nutrition interface would highly benefit with a lot more engagement with veterinarians and animal scientists. Everyone agreed also that the breeding animal source food for high nutrient content is a highly overlooked area. We could approach this much as we're doing

with breeding more nutrients into crops through the Harvest Plus programming, and also just the effect of zoonotic disease, interactions within persons and health. We need a lot more help with veterinarians and the animal community on that. Next slide.

In terms on the take away on uptake of technologies and recommendations, the key weakness here was that we're not doing enough work in this area of social and behavioral communication change. We need more nutrition education focus on incorporating the nutrient-dense foods into traditional meals. We're having relatively good success on traditional nutrition intervention such as breast feeding, that kind of thing. But in terms of nutrient-dense foods, we need to figure out how to better do the messaging.

Also, a lot of interesting conversation about what is the best age for messaging. A lot of people felt that we were overly targeting older populations and we need to much more target youth correctly, even down to the elementary and secondary school level.

We also have to remove this kind of western savior complex we have about our beneficiary. These beneficiaries in the small holder households, we have to perceive them more as actual customers in their private, sector-driven food system. And we'll get a lot better results in nutrition if we do that.

Policy was also considered to be an area highly needing more research. The basic aspect here is that weak nutrition policy at the national level is firmly undermining the rollout of our best agricultural, nutrition-related interventions. Last slide.

Then we had to think about consumption patterns. We have kind of very poor understanding of what our households are choosing to buy and sell. We need to understand better how price, income, nutrition, availability, perishability and social taboos interact to determine the household level choices that are being made. We have to keep in mind that increased income is not directly proportional to improve nutrition. You can go down that slippery slope of more income leading to intake of junky food.

And if you talk to some of the best nutritionists in the best universities, they simply make the statement like this. We just don't have a good handle on household level food consumption. We really don't know what they're eating in the urban household or the rural household.

Animal source foods, everyone is agreeing more work is needed. But what's the actual frequency needed? One egg a day? One egg per week? What do you actually need in terms of getting a child over the hump of a bad malnutrition situation.

And finally on metrics, current metrics we're doing a poor job of assessing household level consumption pattern and whether or not we're really achieving diet diversity. And even when we think we are achieving diet diversity, we don't really know if improved diet diversity is really getting us a better health outcome.

Finally, we need better metrics on income. What income levels are needed to achieve better nutritional health outcome, and what if the level of affordability needed so that nutritious food can actually enter the household and make a difference? Thanks a lot.

Robert Bertram: Thank you, John. That was really fascinating and I'm sure we'll get a lot of feedback from people who are listening. So now we're going to move on to the next session, which was the agriculture-led, economic growth research, and our presenter is going to be Jerry Glover, the Program Area Lead on Sustainable Intensification. Over to you, Jerry.

Jerry Glover: Thanks, Rob. Thanks John and everyone. I certainly want to echo others appreciation for the facilitators, note takers and so on. Certainly made our jobs much easier in doing this smoothly.

We have five different question threads on agriculture-led economic growth. We kind of distilled the responses into three broad categories, though, because there was so much in a relationship between those three questions. We often got responses about several questions in one question thread.

The first broad category was one research to improve productivity. There was strong support for the idea that we need to increase productivity in many of the regions in which we're working, whether we're majoring as yields or economic returns or even efficiency of nutrient inputs and so on. So there was wide appreciation for that.

But there was fairly consistent feedback that we do need to use a systems approach, essentially going beyond production of specific crops, a system overall. And this even includes looking up and down the value chain, for example, on post harvest handling and so on to ensure that the quality, quantity and value of production is increased.

There was also a nice discussion around the different types of farmers and the need to appreciate that not all farmers are the same. Not all have the same capacity to take on new technologies or management practices and studying what the differences are and what the different needs are is needed to improve productivity for a wider group of people. And remember on agriculture-led economic growth, we mean more inclusive and environmentally sustainable. So identifying the different farmers, the different resources they have available is critical to achieving that wider objective.

And that led into many people supporting greater work to increase on farm diversification, to increase the quality and value of what's produced.

Of course, all that calls for more inter-disciplinary research approaches. And I will say overall I think we touch on all those issues in different ways. I think now it will be up to us to identify where we strengthen our current efforts, how we tweak it a little bit to ensure those approaches are better addressed.

The second broad category that was identified was how to improve technology adoption. That's on the second slide. Again, people were very aware of the fact that technology adoption doesn't just happen on an individual farmer basis but really needs to include quite a few stakeholders beyond the farm, taken into a better consideration of the private sector, those providing the input. And also better linkages to the larger development projects. We have to remember many of our research activities are relatively small so we're directly interacting with a relatively small number of farmers even though often it runs into the tens of thousands, our impact we want to have is on population scales, millions of people. And making the connections with the larger development projects is critical. And of course ensuring that farmers are engaged throughout the entire process.

The third large area that we've identified was on the enabling environment, the larger environment that includes how people have access to credit, the infrastructure by which they get their goods to market, the government regulations that really influence household decision making in terms of what they adopt, how they use it and their access to markets.

It was pointed out that we need better understanding of the specific not just national but also local regulations, formal and informal,

that influence access to land, ability to produce a wider range of goods and services.

Another critical area people identified was around financing. How are people using money? How are they distributing money? What's their access to financing and how does that play across regions, not just within local or even national level but in the wider region.

One topic was looking to improve the harmonization of the regulations across areas. I think one good example, for example, in our seed systems. Improving how one country interacts with another country in terms of approving seeds that can be commercialized and sold, reducing some of those barriers to certification and approval process is very important. Of course, that extends well beyond seeds. It includes fertilizers and other equipment.

Then, of course, the idea of the private sector in the enabling environment was brought up in very different contexts and different ways. Improving our understanding of that, what's the connection between improved and enabling environment and the benefits to small holders. But including connections to the private sector.

Now as I said on that first point, we touched on many of those issues within our current research so I think it will be an interesting discussion and perhaps struggle to determine the right balance, the right focus and the right emphasis. But the conversations that came out of this effort I think are really beneficial to our effort moving forward. So thanks to everyone.

And I now turn it over to Greg Collins on resilience.

Gregory Collins:

Thanks, Jerry. I think one important thing to note before I get into this is a lot of what Jerry has already talked about, what John has talked about, are definitely related to resilience, feed into resilience, are sources of resilience. But the elevation of resilience in the global food security strategy is forcing us to think beyond how we previously conceived of risk management resilience. I think that's how we tried to organize some of the questions for this session, beginning with a question around measurement.

I think there has been tremendous advancement over the last four or five years in measuring resilience. I'm thinking back to the time when people were arguing over what was the right outcome that

served as a proxy of resilience to now a deeper understanding that resilience isn't an outcome at all but rather a set of capacities that realized in relation to a variety of shocks and stresses. And then through that, we can assess how those capacities mitigate or moderate the impact of those shocks and stresses on various outcomes of interest, whether it's nutrition, productivity, food security, poverty, etc.

So there has been advancement in the measurement space, but it's really been focused on sort of the household and community measurement level. Even in the way USA defines resilience and the way it's articulated in the global food security strategy, it's very clear that we conceptualize resilience as existing at multiple scales from individuals in households to communities and systems and countries, and those systems could be market systems, ecological systems, social systems.

But our measurement work hasn't kept step, and I think one area of research is a much more refined way of measuring sort of systems level resilience capacities as a complement to our measurement of other scales.

I also think there's a tremendous demand from governments for support on resilience measurement in part because measurement resilience is one way people begin to understand what the heck we're talking about when we use that term. So I think getting beyond the sort of very, very complex approach to resilience measurement, the practical use is that policy makers can then take up and implement is going to be critical.

The second point here is about prioritizing investments and social protection in market systems. I think this is a key aspect certainly of our learning about how to approach resilience is it isn't about a single sector intervention. It's about thinking about risk broadly, thinking about the different tools that need to be brought to bear. Certainly social protection plays a key role and in particular the emergent research on shock responsive social protection, that is social protection, safety nets that are able to expand when _____ events occur to lessen the impact on households.

There is a point on this slide at the bottom about a tradeoff between productizing goals and resilience goals, and I think there has been a tendency to think about it that way. But if we think about the complex risk environments in which we're working, I think a better way to think of it might be we can't achieve these productivity goals without building people's resilience capacities

given the complex, compound risk environments in which we're working.

So the next slide points to another emergent area of research I think is critically important around behavioral development and social cognitive research. I want to focus in on a particular sort of subset of this and that's evidence that's emerging around the role of aspiration social capital or the ability to lean on other households, women's empowerment and overall empowerment, as sources of resilience that transcend our sort of sectionalized view of the world.

So we've got an initial sort of set of applied research that points to how important these are. I think we need additional research and the discussion definitely reflected the need for additional research in this space. But the huge leap here is how do we make the leap from yes, aspiration, social capital and empowerment are important to how we actually strengthen those social, physiological factors through programming. So there's an applied angle to that for sure.

The next area of discussion during the exchange was on financial systems and in particular the role of insurance. I had a good opportunity earlier today to listen to Michael Carter and Alon Desombre present on the lessons learned on index based livestock insurance, index based agricultural insurance. And one of the key take aways that Alon made that I thought was a key take away from this Ag discussion a need not to think about silver bullets here but rather think about the broad set of tools that include but are not limited to insurance in terms of risk management. There were good examples given of yes, insurance, but also emergency credit, the role of shock response and social protection. So I think there really is this move toward thinking about risk management in a very broad way and not thinking about single tools.

Again, I think it's incumbent on us to show through research the advantage of a more comprehensive way of thinking about approaching risk management to the governments we're working with who frankly, just like us, are split into bureaus, departments and ministries, each of which is handling a slice of risk and no inherent institutional body that's bringing that all together.

And then the final point that really, I think, had a tremendous response on the exchange was talking about livelihoods and livelihood diversification. Jerry spoke a little bit to on farm diversification but I think what's being asked here is really a call for a broader conceptualization of hetero-geniality of pathways,

sustainable pathways out of poverty that are available to different households and communities.

I think one thing about the global food security strategy is it does a much better job than the prior strategy of recognizing that heterogeneity. It's absolutely true that a significant number of the farmers we work with are going to buffer risk by doing better in farming, better production, better links to market, the ability to accumulate assets, income, purchase insurance.

But there's also a significant number of households with different asset profile, different resources, even different aspirations who are already stepping a foot out of agriculture, not just out of production but even out of agriculture altogether are moving out entirely. So there is a need to think about not only diversifying on farm or within agriculture but diversifying livelihood risk profiles, including on farm and outside of agriculture, particularly as it relates to climate risk. I think this issue about youth is incredibly important as it came up in the exchange. We need to really come to grips with yes, there are youth that want to become farmers and see it as a business, but there are a lot of youth that conglomeration in urban centers that see a different pathway for themselves. So the opening up of multiple pathways and how to do that is a critical research question.

I think I will leave it there and pass back to Rob.

Robert Bertram: Thanks very much, Greg. These were all great summaries. I think now we turn it back to you, Brady.

Brady Deaton: Thank you. Nora, John, Jerry and Greg, excellent presentations. Very rich. Julie, we were going to pause here for a moment I believe for any questions from the chat box coming in. let me say I am conscience of time also, but we certainly want to make this as interactive as possible. Julie?

Julie MacCartee: Thank you, Brady. We had a question come in from Mark Varner that I thought I would raise. He said that the focus of this complication was a realignment of the research agenda and not program implementation. That there were many postings in the AgExchange that were focused on implementation. Do we consider this to be an indicator that more research is needed on program implementation itself?

Brady Deaton: Any of the panelists that have been up so far. Rob, want to address that question?

Robert Bertram: In a lot of areas of development we have what we call operational research. The health sector is particularly known for that. I like to think that one strategy on this that we have used, and I invite my colleagues to comment on this as well or others online, we try not to silo research at the level of actual implementation on the ground. So in other words, we try to build social science into the innovation labs when they're working on the ground so there's always something in view. And in some cases, some labs are directly focused on some of these social science approaches to understanding transformations and decision making and asset management.

I think Greg's comments raised the points of to what extent do we have new understandings from resilience that might suggest we look at those somewhat differently, change them, possibly be more of – just this kind of thing. So I think this is the sort of thing we're going to be asking in a number of different respects. Let me turn to my colleagues and see if any of them would like to comment. Anyone amongst the BIFAD members wish to comment?

Brady Deaton: This is Brady. I will just add that to Mark's question, I speak for myself but I think other members of BIFAD also may share the thought that knowledge generation occurs at all levels and the program implementation involves a lot of both social science understanding on the one hand and the integration among scientific areas as programs are being implemented and administered. There are times that the organizational legal framework, institutional framework lends itself very well to important research questions that we should undertake. So I would not want to isolate it from an ongoing concern about appropriate research that may be needed. That's from my perspective.

Robert Bertram: Brady, that's very helpful and it also makes me think of something else. In the Bureau of Food Security, we have a markets, partnership and innovation office. In other words, what you're getting at I think is there's a learning agenda and an innovation agenda, yes, in our research side but also in our development implementation work that Mark was speaking about. Yeah, I think making those connections robust and being mindful about that learning and particularly the interface between the stuff we call research and the stuff we call development is really important.

Brady Deaton: Thanks, Rob. Given the timeframe my sense is, Julie, if there's a question burning I wouldn't want to eliminate it but perhaps we should turn now to members of BIFAD and then these questions

also can be introduced at a later time. Is that okay or do you have something you want to bring up right now?

Julie MacCartee: I think that's fine, Brady. We can go ahead and move to BIFAD and then we'll take some more questions at the end.

Brady Deaton: Great. First let me thank all of you. Really, this has been absolutely a rich presentation. My comments will be very brief and I mainly wanted to emphasize that the discussions that I've seen over the last three days have been just absolutely phenomenal. I know that other members of BIFAD who are moderating and interacting with various groups around the world will make this a continuing, very rich discussion. We heard a lot of discussion of interdisciplinary, and I would want to emphasize that. I was rather surprised at how significant that was in each of the areas being addressed here, these strategies for resilience, technology, adoption and identification _____ technologies, decision making at the household level, all these were very, very critical in an interdisciplinary context as we think about research things.

I think Greg spoke a moment ago to what I saw anyway as a key challenge emerging from this is that of coalescing the very rich discussion that we've had over the last three days and identifying the leading edge for research. Mark's emphasis on programmatic implementation is very important that we continue, Rob Bertram, the discussion we were just having, I think, as we sort this out.

And the way in which this thing relates to specific groups, certainly to use the multiple pathways for youth becomes very important because in youth lies our future and we have to be concerned at all times about how that transforming model we're working with is engaging and challenging the next generations coming along. Those were key points that really hit me as I listened and have heard your discussions.

Let me know turn to Pamela Anderson and ask Pamela to give us her summary. Pamela is, as you know, is the Director General _____ of the International _____ Center. Pamela, welcome.

Pamela Anderson: Thank you, Brady. I just want to echo what most people have said. The three days were really enjoyable and very, very rich, I helped Jerry Glover moderate part of the income growth session, but I participated and followed in all three of the discussion topics.

I wanted to make just an additional comment to what Jerry shared and then focus more on what I saw cutting across the three areas. I

think one of the things that surprised me is not what I heard but what I did not hear. In the ag-led economic growth section, I really did not hear discussion on what we could call the traditional ag productivity research agenda, how we protect past productivity gains, the changes we need to make in research on genetic gains going forward, and that surprised me a lot.

But what was interesting about it is really speaking to what Jerry was talking about. I think what people were calling for, at least what I heard, was that we need more research to increase the efficiency and the impact of that traditional productivity agenda. And so things like yes, segmentation, contextualization and much better targeting. Who are we actually trying to improve productivity for? What do they need? What do they want? So we can get sharper in terms of our methodology development and our product development in the uptake.

More work on economics. There were some important commentaries in the context of scaling up and scaling out. We need economic analyses so that we can really understand the cost effectiveness of different alternative products and actions across the portfolio. More market research, more agenda research. So there was a real strong call for research that is enabling beyond that traditional productivity agenda. It was very interesting to me.

As I listened across these different topics, there were a couple of themes that emerged across all of them and I suspect that as AID digs into the details of this, they will ferret out more and it will be good fodder for reflection.

The two that I picked up on the most, of course, were gender and particularly women's empowerment. It wasn't addressed in the depth that I had wished or hoped, particularly in the section on resilience. But it was there. And looking at what that looked like if we look at it in a real cross-cutting manner.

The theme that was more interesting and came out more vocally was diversification. Jerry and Greg alluded to that already. Diversification to improve nutrition, to increase ag-based income and as a resilience factor.

The details of that, of course, are going to be local. So the need for contextualization. But one of the thoughts, and I think Rob actually voiced this during the exchange, was perhaps it's time to think much more strategically about the role of global research in understanding and addressing risk factors in the diversification of

small farmer, fisher and pastoralist systems, so that cross cutting theme of diversification.

So there are a couple of the whats. But the other big thing I think I was hearing as I was following along, and this may be a little bit of what Mark was alluding to just now was not just what research we need going forward, how to realign the what, but of really a lot of conversation around the how. How we undertake our research and how we frame our research agenda. The real discussion that just kept coming back and back to me is what I would probably call our collective struggle with compartmentalization. So the compartmentalization between social and natural sciences, although people did point out that's getting better. Between ag and health sciences and professionals. Between the public and private sector across the interface of research and scaling and utilization and analogy just pointed out, too, research and development.

So a real call, in a sense, that we shift much more intentionally from compartmentalization to integration and convergence. How would we think about that. And I think there's a lot of merit to do some deep thinking for the colleagues at AID as a major global donor. Are there _____ ways of allocating and granting funds such that you could enable or force that convergence?

This is the last comment I have. The other shift that I heard people calling for was a shift in how we frame our research agendas, specifically the need to look from much more from the demand side instead of our historical focus on production and supply-side research. And those calls manifested, for example, in suggestions from much more of a market-driven approach and for a move from our historic commodity-framed research agenda to more of a consumer demand set of research agendas. I just heard a lot of discussion, and I'm not sure I'd call it implementation, but really questioning can we accelerate and make more progress, have more impact if we really take on how. And some of that is going to involve research questions, and some of that is going to perhaps be in the hands of AID as you think about how you condition the money, how you allocate the money and what you can do to really drive some of those changes in how we do research.

That's really what I wanted to share, Brady. It was a wonderful three days and I would thank all the colleagues at AID and _____ spent so much time organizing this for us. Thank you.

Brady Deaton:

Pamela, thank you very much. Superb summary, really. Look forward to further discussion on that. We'll now turn to Cary

Fowler, former Executive Director of Global Crop Diversity Trust.
Cary?

Cary Fowler:

Thank you, Brady. Good afternoon, if you're in my time zone at least. I want to focus primarily on the topic that I co-facilitated with Rob Bertram on Tuesday, and that concerned the criteria for prior causing research investments.

I think the first thing to say would be that it appears there's broad and general satisfaction with the criteria that USAID is using. If there are disagreements or difficulties, they probably arise in the area of the details or implementation.

But having said that, when you talk about criteria, you're really talking about something that is one level of extraction removed from what people really want to talk about, which is what you're doing or not doing. And it struck me that what we might want to do as perhaps USAID staff and BIFAD is to look at our existing criteria and see if they are complete enough to have at least encouraged a consideration of the different, more substantive points that were raised during our discussions.

I saw going across all of the discussions a lot of concern about scalability, about cost benefit and Pamela just mentioned about diversification. And I guess that really just reflects a great deal of concern about the importance of these issues and uncertainty, I suppose, about whether we're really handling them correctly.

Then I wanted to mention a couple of points that I don't think got a lot of attention but really struck me as being quite important when they were raised. Someone on Tuesday raised the question of comparative advantage. What is USAID's unique role, it's comparative advantage and the cost benefit of that?

Second would be are we positioned appropriately in terms of support to both long term research and short term? Are we dealing appropriately with those different types of research and do we have criteria that helps us make those kinds of decisions?

And the third which Nora mentioned earlier, the topic of big data, big data used to capture trends, adoption, emerging needs. I thought that was a really interesting comment and worth some consideration.

And I would simply add to that sort of the opposite. What happens when we don't have very much information? We don't have very

much data about a particular research area, a particular crop perhaps for crop breeding. Does that introduce some bias in our decision-making process to distract us from perhaps worthwhile investments in those particular areas?

Finally the one surprise to me of something that didn't come up too much was the question of climate change. And the extent to which we are paying attention to that and dealing appropriately with that, both in terms of mitigation and adaptation, given the fact that obviously it's going to affect virtually all aspects of all of our work.

I'll end up simply by thanking the staff, as everyone else has. Incredible discussion, really interesting and something I think we're going to want to go back to and read over again and ponder.

With that, back to you, Brady.

Brady Deaton: Thank you. Excellent comments. We'll now turn to Gebisa Ejeta, the final BIFAD member here with us today. Gebisa Ejeta is a distinguished professor in the Department of Agronomy at Purdue University. Gebisa, turn to you. Gebisa, are you on the line? Am I connected?

Julie MacCartee: We can hear you, Brady. Gebisa, are you muted by any chance? We're not hearing your voice coming through.

Brady Deaton: I was afraid for a moment I was lost.

Julie MacCartee: Brady, you're fine. We don't have Gebisa. Wait one more moment, but it's possible we can _____ if needed.

Brady Deaton: If Gebisa breaks in we will pause for him. Let me thank other members of BIFAD for their discussions a moment ago. Why don't we go ahead, Julie, with other questions you may have accumulated that have come in online. Share some of those and we can have discussion on those.

Julie MacCartee: Sure. Perhaps first, we had a few comments come in on nutrition and I think John Bowman was interested in making a few comments, in particular Deepa mentioned that nutrition research priorities also have to take into account that the incidence of overweight is also closely related to poverty and the dual burden of non-nutrition. If you wanted to comment on that or anything else.

John Bowman:

I'll try on that a little bit later. I wanted first to address Cynthia's commentary about yeah, we do need more information household consumption, but she raised this problem of interview fatigue amongst our beneficiaries and I think in the discussions we were having in the nutrition session, we just need better techniques. I think there's no doubt we have to get into the households whether they're urban or rural and ask questions and get data. The idea is, though, we need to do more out of the box thinking in terms of having a better interaction with that beneficiary so they don't become fatigued, so it becomes a more worthwhile exercise and we get better information.

So this one comment that came up in discussion about treating our beneficiaries in the perspective of western savior type approach and making more of an effort to treat our beneficiaries as consumers no matter how poor they might be, as consumers in a private sector driven world of food production buying and selling. This is one thing we need to do. I don't know in terms of how you actually when you get in the household, how you treat these folks more as customers versus you have to kind of put your idea of tree hugging and people hugging behind you and treat them a little bit more clinically as customers. We have to figure out ways to do that. Maybe when they see folks are there in the household interviewing them with the practical consideration of them as customers, maybe the situation will improve.

Deepest question was more about we do have to be concerned about, as income levels rise, we're going to have these problems with obesity and problems with non-communicable diseases, cardiac problems with fat consumption and this kind of thing. That's a really charged subject. We're well aware of this problem. Many will say that we just need to address the many people who, they're far from an obesity situation. They're on the threshold of dying. But trust me that nutritionists at AID are looking at both areas. Maybe we have to improve the balance more towards the obesity question. I mean, if our Ag productivity, economic growth activities really do improve income to the point where the main problem is that people are buying too many infant noodles and cookies and soda pop, I'll be somewhat relieved if that becomes more the driving concern than getting people away from the threshold of death. Others may want to weigh in on that. But we're aware of it. We maybe need to do some thinking and strike a better balance.

Brady Deaton:

John, thank you. Any members of BIFAD, the board, want to address that issue? Otherwise, Julie, I'll ask if there are other key

questions you want to bring forward that members of the board could respond to.

Julie MacCartee: Sure. I think this was partially addressed by everyone's comments, but I appreciated that our colleague Laura _____ pointed out that we are still accepting comments on the AgExchange through the end of the day tomorrow, through 5:00 PM Eastern Time. As such, do the USAID or BIFAD members recommend any more feedback on any particular questions that weren't fully addressed? Is there anything you would like to see the community continue to comment on through the end of tomorrow?

Brady Deaton: Julie, the one point I would call attention to is the absence of the discussion on past productivity, to use the phrase Pamela Anderson used, in traditional areas is an area that more attention should be given to. Or is there such an emphasis now on the other issues that were made about the contextualization, the implementation, the 'how' really. Does that really reflect what the feeling is out there or is there some specific concern about past productivity. That was one question that came up. Then the absence of discussion, as Cary mentioned, on climate change also, are those issues longer term and therefore get less attention? Those were questions that jumped in front of me anyway.

Pamela Anderson: This is Pamela. While it was brought up, I still think the discussion across the topics on gender was quite weak. And so if people feel like actually responding a bit more in terms of the gender research agenda across the portfolio, I think that would be very helpful.

Jerry Glover: This is Jerry Glover. I will say that our emphasis on gender issues in our research _____ a lot more attention than the topic did on the chat discussion. However, it's somewhat covered in people encouraging us to really find ways to understand the households, how the decisions are made, who they're made by and what the priorities are. In many ways, that takes into account the different viewpoints of different genders, even including the different access to resources and so on. So there's a little bit wrapped up in there.

I will say our research in general tends to focus much more on gender issues than the discussions did that I saw.

Robert Bertram: This is Rob Bertram and I wanted to say that a similar case in point about the things that Pamela flagged and Jerry flagged and Brady seconded in terms of both the leveraging the advance science for productivity games including around meeting and merging threats. We have significant efforts on that. Then the second thing is the

climate change piece has been very central. What we've been thinking about a lot is how resilient an adaptation to climate challenges are going to continue to be emphasized. We may also, though, be talking about them in very much real time, this reflecting the fact that so many of the areas we're working are already climate challenged.

But I share the surprise that the members of BIFAD had, but it's also interesting because both of those themes are very prominent in the current research portfolio and were emphasized under the future research strategies.

Pamela Anderson: And maybe, Rob, it didn't come up as prominently because people feel that it's actually already getting the attention it needs so there's not that much realignment. But just kind of double checking. If that's how you feel, fine. But if there are things there, it would be great to bring forward.

Brady Deaton: And Rob, the emphasis you gave to leveraging advanced science really speaks to the whole of government approach also, which you've continued to emphasize. And I think it's heartening to know that that will remain a very strong thrust where USAID could perhaps provide some leadership in that synthesis from the more advanced science to those programmatic, operational changes that many feel are needed.

Robert Bertram: That's right. And Brady, an organization that's not one of the Global Food Security Act agencies but is very interested in topics like this is the National Science Foundation. So we realize in a sense that the United States is almost uniquely positioned in the global community to really leverage this, including also from our private sector.

Brady Deaton: Yes. Yes. Given the time here, we had set aside ten minutes at this point for discussion among board members given that this is really serving as a meeting of BIFAD. I did want to double check, too, to see if Gebisa Ejeta, whether he is online at this point. Otherwise, Pamela, Cary and myself represent the board members that are with us I believe at this point. Let me just raise that issue, then, of opening the floor up for discussion among board members. And certainly we can bring in questions from staff as well. Pamela or Cary, may I turn to either of you, if you want to make any specific comments. You've raised some excellent points in your summaries, which I thought were just right on target.

Cary Fowler: Brady, this is Cary. Could I mention something real quickly that I should have said before. We had an excellent background research paper that was put in the table for all these sessions, and that was the paper about _____ masters on impacts of agricultural research. I simply want to say thank you to everyone involved in that. But also to commend it to anyone that might be listening. It's a great document to help us, I think, in our appeals for a long, long time.

One of the uses of that document we might consider is simply to take another look at the successful research that's been done in the past and ask ourselves are there reasons why some of the success stories can't be repeated. Are there reasons why we're continuing to go in the wrong direction in some of the research that wasn't so profitable? So I think it was a big contribution to this whole discussion and could continue to be.

Brady Deaton: Excellent point.

Pamela Anderson: Brady, I have a couple of not observations as much as questions, maybe, to kick back to Rob and Sheila and the USAID colleagues, things that came up that I thought I was hearing these past couple days. One of them was a lot of conversation on targeting and again, going back to this need perhaps to do more segmentation. You know, it would be interesting to understand how much the AID team has really grappled with the segmentation and targeting. Who are we really developing and delivering and working with. How are we trying to get at these impacts that we're getting at? Who are we targeting? And if we had, not right now necessarily, but perhaps share that a little bit more explicitly with everyone. And if they haven't, how do we go about that?

And the second point is landscaping. I have this sense after some of the euphoria that many of us felt tragically after the food price crisis, seeing political and financial attention come back to food security, it feels as if we're now going forward into an environment globally that might be constrained in terms of human and financial resources for research. So synergies become even more important. And I mean that in terms of synergies within the program and we've talked about some of that today, where can you get enhanced impact because it's appropriate and relevant across all of the objectives, but also synergy with other players.

So my question is how much landscaping have you done because the rich calls and requests for research that came through obviously, there's not enough money in one agency to address all that. One of the ways of addressing it is doing landscaping to look

at who else is doing that research, how do you partner. So the questions how have you approached targeting and can we get some more discussion as we roll forward on segmentation and targeting and how have you approached landscaping and what is that going to look like. So that's really all I had to ask and add at this point.

Brady Deaton: Excellent question. Do we want to entertain some questions on that point at this time, reactions from Rob, Sheila, others? Nora? In the panel?

Jerry Glover: Perhaps just a quick response on I guess the segmentation of farmers, the types of farmers, the different types of farmers. We do have actually quite a lot of research on that within our systems program in which different systems or different innovations have been developed based on the resource endowment and, as Greg previously referred there, aspirations.

For example in Malawi, two different types of maize legume systems for different types of households. And it was after extensive study on how many different types are there typically for the represented populations that we're targeting, and then how many different approaches do you need for the different typologies. And for those in Malawi, they identified two maize legume systems that seemed would satisfy many of the population's Feed the Future targeting. So that's just one example of using a lot of participatory research, looking at household decision making, household typologies that the scientists working directly with the farmers developed systems that seemed economically viable, certainly increased productivity for two different sets of households.

And one of the real limiting factors there was farm size. Smaller land areas you're more restricted in what you could do.

Robert Bertram: Could I add to that, Jerry? You mentioned the farm size issue which did come up a little bit in the course of our discussions. And it made me think of something that _____, the Director General of IFPRI, talks about. And it sounds a little harsh, but I don't think it's meant that way. It's up or out. In other words, he's talking about the fact that some small holders are probably going to diversify their livelihoods seeking jobs elsewhere, and I think a lot of our thinking in the resilience sphere looks at the multiple strategies. And this doesn't mean they give up their land necessarily. It may mean that there is space to aggregate land at the community level in terms of investment. We think a lot about service vision in terms of land management, things like harvesting

and irrigation and mechanization. We have a lot more evidence in this area in Asia than we do in sub-Saharan Africa. But certainly this is all tied in.

It really comes back to Pamela's flagging of this targeting issue, trying to understand the dynamics. A lot of people are thinking about this. I think we need to continue to grow that evidence base. As people have better access to information, and infrastructure improves, I suspect people will be ingenious in many ways, not all of which we can predict. But we need to keep an eye on it.

If I can make a very quick comment on the last taping question that Pamela raised. I think we are all thinking about what are the _____ right now that would do a couple of things. One of them is what can we do that can really show that this is truly America's effort to address food security and hunger and under nutrition in the world. Extreme poverty. There are other American players in this, and I think we've already talked a lot with them and worked with them. But I think maybe that's something we're even trying to think more about, and maybe also are there ways to analyze that to identify others that we ought to be talking to.

Traditionally our great strength has been with the university community, and that continues and it's been incredibly robust and exciting under Feed the Future to see the innovation and many other engagements from that community.

I then think that, and I think Pamela would want us to do this as well, is then let's look beyond our shores. One more thing, too, before we leave our shores. We have a lot of community here that cares deeply about the people facing resilience issues. the whole side of USAID and the whole private, voluntary organization, a rich, rich vein in our country that reflects many, many good things and has a lot of knowledge and experience, I think maybe that's another area where really deepening, particularly in this resilience context, we can learn.

And then beyond that I was just going to say let's look beyond our shores to see where else in the world we have that opportunity to find like-minded who recognize the synergies that could come by bringing our resources and perhaps even our programming together.

Brady Deaton:

Rob, thank you so much. Thanks to everyone for the very thoughtful insights you brought forward. This is a good segue into the next segment here which was –

Julie MacCartee: Do you mind if I interrupt for just one moment? I wanted to let you know that we do think Gebisa is back on the line and he might have a few words to say.

Brady Deaton: Okay. Hello, Gebisa?

Gebisa Ejeta: Yes. Hi, Brady.

Brady Deaton: Yes. We had wanted to give you a moment for your reflection on the sessions, on the AgExchange that you participated in.

Gebisa Ejeta: Yes. We had a good session this morning. My sense was that particularly in the research section, the engagement was very good. I'm not sure how it went yesterday and the day before, if they had full participation in all the threads. But it was richer in our section under this criteria, even though we didn't iterate with each other as much, there were several important points that came through and that was very encouraging, at least an initial _____ pieces that have come out and could be pursued by those that would do further synthesis. But I wasn't sure if either the fact that this was the third day and people were dropping out or whether or not we may not have the right sets of people contacted, particularly those that are engaged in national resource conservation and resilience area. The discussion, I thought, could have been richer.

But again, the more important message that I wanted to share was just one out of the five _____ were the ones that we dealt on a lot more today.

Brady Deaton: Okay, Gebisa. Thank you so much. We will turn now to Sheila Roquitte, Director of the Office of Agricultural Research and Policy, USAID Bureau for Food Security. And she will be writing remarks about the next steps and the research strategy development process, something that we're very eager to listen to. Sheila?

Sheila Roquitte: Great. Thank you so much, Brady. As you noted when you started off in the very beginning was how much traffic we actually got on this exchange, and I've been told it's actually the biggest one we've had yet. So I really want to thank everyone for their input. The input we're getting from around the world is really important to us. The thoughts and ideas that are helping us hone this strategy are of great use.

For a moment I just wanted to step back and reflect on the process that we've gone through to get to the point where we are today, and I'll describe briefly as well the path forward.

So after we delivered the Global Food Security Strategy to Congress on October 1st, we held a number consultative processes, many of which you'll see on the slide. These processes included working with colleagues across the US government, including the ten other departments and agencies identified in the Global Food Security Act, and many of our partners including the US universities that head up our innovation lab, _____ national, regional and global partners in the places that we work around the world.

We got input from our field missions that coordinate our inner-agency work on the ground, and this e-consultation, of course, was a way for us to open this up globally for public input.

This e-consultation concludes our formal information gathering process. Next, we will be sifting through all of the rich contributions that we've gotten over the past eight months, and put that into a draft of our research strategies that we will do in collaboration with our interagency colleagues and with input from _____ members.

Remember, I would like to remind people that the document that we will be producing is a very high level document at the 30,000 level that will help guide these research investments across the 11 different departments and agencies. The more detailed level plans you'll find at the agency level as they develop their own implementation plans and implement their program.

So we expect to have the strategy completed this summer and once it's completed it will be posted publicly on the Agrilinks website and in other places. We will also share and disseminate the US government strategy at public events, and a few of those are noted on the slide.

As Julie noted as well, there was a short survey that was emailed to you about this closing webinar but in it you can indicate to us your interest in continued engagement as we go through the next phases of this _____ process. So please fill it out for those of you who want to remain engaged.

Lastly, I would like to give a heartfelt thanks to the BIFAD members and our interagency colleagues for their leadership, sage

advice, guidance and ongoing support throughout this process. We really look forward to your continued engagement. As Brady and Rob noted, it took a lot of people to pull this together, a global village, if you will. This amazing team comprised research and development institutions and individuals around the world, as well as government, civil society and the private sector.

And personally, I would like to thank _____ and Rob Bertram at USAID for their unflagging leadership and passion for food security issues, not just around this AgExchange but every single day they keep us motivated and going in the right direction.

So with that, Brady, I'd like to turn it back to you.

Brady Deaton:

Sheila, thank you. That's a beautiful summary and I echo thanks to all that you mentioned, and Julie and Sheila yourself, thanks for your role here today. And to Pamela, Nora, John, Jerry, Greg and Rob Bertram, particularly for your ongoing role that we've been so enriched by, I think you. I particularly thank BIFAD members, board members that were able to participate, Pamela Anderson, Gebisa Ejeta and Cary Fowler. A tremendous time and I was able to observe this during the past three days, and the tremendous insight that you have shared with others around the world and in this discussion today. It's delightful to know that this really was the biggest one yet. We always are intrigued by that. And with the _____ colleagues we have in place, really looking forward to further discussions of the whole of government approach that can help shape the strategies for the future.

This really concludes the live audio session of the AgExchange. I, in doing so, want to thank all members of the public for their engagement and participation in the event. Session presenters, facilitators, summarizers, they really represent teamwork of the finest and I hope sets a pattern that we can continue as we go forward. Those of you in _____ food security that I've mentioned already along with _____ Executive Director BIFAD, Kristin Franklin and Julie, I mentioned your ongoing work at the beginning of the planning as well as the other agencies we've worked with, the USDA and APLU and others. This has made this a very rich discussion that I see as a model for so much dialogue that will continue in the future.

It's an amazing team you've brought forward. We want to continue that teamwork and really thank all the dedicated individuals that have made this possible.

You'll be able to find minutes of this meeting on the USAID BIFAD website and the _____ database at least no later than any days after the event. These discussion threads will be archived on the Agrilinks site and while we're adjourning this meeting, the discussion threads continue to be open as I believe it was Julie who said through the close of business April 21st. And I'll be thanking a broad list of people and my final posting on this process as well.

So with that, thank you all for participating and we're looking forward to this being the foundation for a very, very inspiring next few steps. So we're delighted with the process. Thanks to all of you again. Have a wonderful weekend, too.

[End of Audio]