



Agriculture Sector Council Seminar

Public Sector Agricultural Research: Why it Matters for Sustainable Development

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Q & A Transcript

Presenter

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Z.. Baquet: Thank you, Ibrahim. We're going to take questions now. We're going to alternate between the in-person audience and our online audience. Please state your name and your organization before asking your question.

Also as a note, for those online and those in the audience, we had a presentation on total factor productivity by Keith Fuglie about a year ago. He's with the USD ARS. You can look at that online. We have it on Agrilinks. With that, I'll take the first question.

Audience: Hi, good morning. Charles Uphaus, Bureau for Food Security. Two questions. One fairly simple; the other's a little more complicated. The nine countries in Africa, the countries of focus, which are those?

The other one has to do more with Embrapa and the extent to which Embrapa follows the U.S. model of integrated federal, state, land grant combined research extension. How much of that is part of Embrapa? Could you talk a little bit more about how _____ --?

I. Shaqir: About Embrapa?

Audience: Yeah.

I. Shaqir: Sure. Embrapa is working with – Brazil is – obviously I'm not Brazilian. Really. *[Laughs]* Embrapa, they have different centers as with ARS. We are disbursed all over the country here. The same is true for Embrapa. Their funding comes from the federal government, but also it depends on the priority of the states. Also the states provide them with funding. They have a close relationship with universities.

I visited Embrapa last year and the first stop was at a university. I was really struck by that and I visited the university and asked specifically about the level of cooperation between them and Embrapa scientists.

When they have a priority and the priority we were addressing then was citrus greening. That's devastating disease to the citrus industry. So I learned that they're working with Embrapa scientists. Citrus greening for that particular region was important. So they had put great number of efforts and resources, initiatives in dealing with that.

So they have Embrapa, they have the university community and because we have also facilities that deal with citrus greening here in Florida, part of the

University of Florida as well as ARS. So I learned also they have already existing cooperative agreement that deals with that.

So they leverage federal resources as well as state and localized. They also receive funding from like the sugar cane industry there as well.

Question: [Inaudible – off mic]

I. Shaqir: Yes. I have the list of countries right here. I can start by saying Honduras I think. Yeah, I have it. Haiti, Honduras, Nicaragua, Guatemala, Tanzania, Kenya, Rwanda, Uganda and Bangladesh.

Z. Baquet: We have a question from online.

Female: This is a question from Ben Addom from USAID’s global broadband and innovation program here in D.C. who asks, “With the critiques of most national agricultural extension systems in the development nations for their poor performance and ensuring timely and accurate information to farmers, we see the emergence of intermediaries, especially with the coming of the new information and communication technologies, ICTs. What kind of public/private partnerships are we expecting for these intermediaries to tap into public agricultural research outputs to deliver the right ag knowledge to farmers?”

I. Shaqir: Excellent question. That’s a very important issue that we not only countries in Africa and Asia and Latin America deal with, is how can we transfer technology that we develop. How can we disseminate it. How can be targeted to the specific needs of growers.

So you have to have a strong and in this approach has to be really come up with, unless these farmers, you have to have an organization organized groups. Farmers have to be organized and you have to really have a champion to organize these people. Either they’re united through commodity groups or because they have specific needs. Unless you have some kind of awareness of their needs. So this basically will fall on the specific missions in these countries to realize who’s doing what and where.

Not only just listen, but also go and see. Meet with people. Identify their needs and then in partnership with the local governments, schools, anybody that’s working in extension and who is to ensure that we’re doing and funding things that we can ensure they’re disseminating.

The level of technology, let's face it. Many of these countries really they have no access. Cell phone is probably the only thing we can utilize at this time with confidence somewhat, but that's something we need to really find a way to utilize, but you need to have a full understanding what goes on in these countries to identify exactly what they need and tailor it accordingly.

Audience:

Thank you, Ibrahim, for a stimulating presentation. I have a lot of questions, but let me try to get at a more broader one first particularly in the sense of closing the gap and the investments that are required. You spoke a lot about obviously the need to close that gap and investing in agricultural research.

A great deal of your presentation is like we're trying to breed our way out of the problem, but I know that's not the case. However, how do we make sure that the public investments that we're making are being prioritized on the right areas that will help us close that gap? That deals with issues like not just production, looking at areas of harvesting or distribution process or areas that deal with processing. We have a lot of food we're producing. There's a lot of waste unfortunately.

So it's not about just increasing absolute production, but how do we improve the overall efficiency within the system with our investments that we're making, number one.

Number two is that the level of investments, what do you think is required to close that gap. Obviously we're not making enough today. Do you have any estimate about what is really needed?

Just one other question is that – not a question, but it's a comment that I think it's great that we're renewing our relationship with ARS and USDA for Feed the Future, but also I want to recognize that over the last 50 years USDA has been a strong partner with USAID in its promoting its agricultural development agenda.

I. Shaqir:

Well, that's a very good question. It's a difficult question to answer. Again, I think having realizing what's required when dealing with large farmers in any country, in Africa, Sub-Saharan African countries, in Latin America, in Asia. When these farmers, they know exactly what to do to ensure that they are competitive and ensuring that whatever product they are producing is good, high quality and they're competitive. They understand the level of technology required.

So now I'll go back and try to address and these large producers in any country, they are basically set to go. We can pay attention to them, of course, for

economic opportunities and growth, but we want to focus on how these small to mid-size farmers, what kind of technologies that can be tailored to their needs.

So, if we have a technology now, we need to scale it down a little bit to make it suitable for these growers to address their priorities. That requires specific attention. We deal with this issue here in the U.S. where some small farmers, really they cannot afford the technology or they can't afford certain things to maintain productivity and stay competitive. So we have to provide them with some idea, but either specific crops that we can ensure that they can maintain and stay competitive and that's required, specified targeted research to address these problems.

So now to go back to ensuring that these crops, post-harvest issues for specific crops are addressed, we need to look at the current technology that we have that deals with crop producers, for example, and how we can tailor it to these specific needs. Obviously much of that post-harvest issue is transportation and that we have to deal with infrastructure, roads, marketplace.

So you need a collective really effort to deal with that. So that's where you need to have organized, coordinated effort with either large groups, small regionalized, localized production producers, let's say. They're producing certain crops as a cash crop. We have to work closely with these people to ensure the whole chain is sound. That's how we start.

But again, us from here, them there, donors. It has to be coordinated and you have to have the will of the people to tell you exactly what they need. As the large farmers know what they want to do, at some point when you have these people are benefitting from whatever they're producing, I think the end result will be positive.

So it has to be targeted, specified kind of technology. That's where missions and other development agencies in countries have to really work collectively in addressing. Each agency would have one aspect of the chain to target rather than one person that takes care of it all.

Z. Baquet: We have a question from online.

Female: This is a question from Tobiga Zevanu from the University for Development Studies, Washington campus. "Investment in agriculture in most African countries focuses more on export crops with little attention to food crops.

What can be done to this investment pattern without commercializing food agriculture?”

I. Shaqir:

Food crops versus cash crops? Well, they're both important. So emphasis will be on when dealing with poverty issues and food insecurity and maintaining that food is sustained, we have to address that.

Cash crops, again, eventually this is something. We have to target food crops first so people can eat. That's important. We have to understand that. Cash crops are important, of course, to generate income and enhance the marketplace, but I think food crops are essential investment that we have to keep in mind as we are thinking and moving forward with that.

So investment in food crops is essential and should take a priority over cash crops.

Audience:

Thank you for your presentation. I am Kathleen Flaherty from the Agricultural Science and Technology Indicators Programs. It's also known as ASTI. It's a program of the international food policy research institute, IFPRI. What ASTI does is actually tracks investments and capacity in developing countries.

One of the things we've seen with our research, as you've mentioned especially in African countries, is the serious under-investment in public agricultural research.

My question is one of the problems is that some of these agricultural research systems are so dependent on donor funding that when the donor funding ends, the research agencies almost collapse. So there's tremendous volatility of investment, along with low investment. So my question is, is there any role for USDA, USAID to play in encouraging greater public investment by the national governments in their own agricultural research systems? Thank you.

I. Shaqir:

Excellent question. I actually have experienced that in countries in the Middle East, for example. You have a project. You work on the project and as soon as the project, even if you buy a car. If they buy a car though the project it becomes the project car and they will have to hire a driver. As soon as the project is finished, it's like nothing happened. All of the investment just evaporated.

The key here is with any country, AID has to play a close and establish a dialogue with government in these countries and ensure that there is a serious commitment on their part for agriculture development or anything else. It has

to be documented. It has to be coordinated. You have to have leadership that can be committed to whatever we're trying to accomplish in these countries.

Unless you have that, by only having the buy-in from the scientific community or that center director, it's not going to be sustainable. You have to have a government top down kind of yes, we need this, this is important. This is a role where our missions can play an active role in ensuring that there is a long-term commitment from governments in order to ensure the sustainability of this very important investment that we're making.

Otherwise and you have to be not only just on paper, we have to have a monitoring evaluation kind of _____ quarterly to ensure indeed the government is committed and we're making progress.

D. Thomas:

Thank you very much for that presentation. Your presentation is in fact, the third in a series that we began on the inputs that are important for sustained agricultural productivity. The ones we've done already focused on seeds, fertilizers. In the future, by the way, Shenggen Fan of IFPRI is going to be coming here in April, in fact. He'll present some really fascinating work on prioritization related to infrastructure and some other inputs.

But what we hoped to do with this presentation was to also ensure that people are aware that public sector agriculture research is also vital input into this process.

That said, I'm really glad that you highlighted all that information about Embrapa. Brazil is one of the resource countries for Feed the Future. So my question is what lessons, what are some of the key lessons that developing countries could learn, could take away from Brazil, from Embrapa in all of the success that they have had? It's clearly a very strong institution with lots of well-trained scientists.

They have the wherewithal to send their people to work in your labs and in your facilities. So what are some of the key lessons for other countries that would like to close that productivity divide there?

I. Shaqir:

The key lesson is really leadership. You have to have a champion anywhere in order for the country to move forward. They have to have a champion. You have to have a unified strategy and the will and the commitment to move that forward.

The Brazilians realized that. In the 70s they invested, they committed their resources and the reason why they did that because they realized that their population was growing and they cannot maintain enough production to feed their own people. So they invested and they realized so you have – and the reason why they are successful is the fact that they realized some of the benefits of development and improving their agricultural system.

They see their people are benefitting. Their growers are benefitting. Their economy is benefitting to the level where really now they're moving ahead of everyone. Agriculture is only five percent of their GDP and that's important.

If you look at any of these countries that we're dealing with, their agriculture is what? Twenty percent of their GDP if not more. So, that's an important realization that countries – an important lesson that they have to take into consideration.

We at the missions we have to realize and this is something – okay, we don't want to tell people what to do, but to showcase some of these wonderful examples that really benefitted many countries and we can built on that.

So this is a successful model on what you really need to do in order for you to progress and ensure the availability of food to your people and eventually as Brazil. They evolved now as we evolved in the U.S. Agriculture is something that is not – it's two percent of our GDP here. It's important for many reasons, but economically if you look at the numbers, not that – because we have evolved.

For many countries like Brazil, they're about to really move ahead of the pack there. That's important. So you have to have and whenever there is an opportunity to provide these people, provide our own mission directors with these different case studies and when you're talking about something, be able to convey to the people that you're dealing with on how you are certain and you want to not only certain, but you're committed to helping them in a way that can be successful and sustainable.

Z. Baquet: We have time for one more question.

Audience: I'm Nick Brown. I'm with DAI. One of the things that really struck me about your presentation was the diversity of productivity across countries, particularly medium and low income countries.

So, obviously Brazil is a developing nation. They're moving forward and the same is true of China. That partially explains why they have the public sector resources to provide this sort of agricultural research.

I was wondering what you thought about the possibility for the role of agricultural research in the lower income countries. Countries like Zimbabwe or Moldova or Tajikistan and if you think that the same model as Embrapa can be adopted there and if not, what sort of adjustments need to be made to tailor it to those sorts of environments?

Male:

Good question. I think the key is, as Embrapa, as Brazil is you have to have research, to answer the question, is essential in agricultural development and growth.

The problem with many countries is some of it is our fault and a lot of it is the commitment. So we bring and we train people either in country or we provide them with opportunity to go overseas or come to the U.S. for training.

This educated bunch will go back and because they're educated, all of a sudden they're snatched and promoted to something else totally unrelated to what they need to do. So how can we ensure that these people will go back and train the trainers. How can we ensure that is are really truly providing benefit to their people in helping them with new technology or the scientific discovery that can enhance their productivity and address their needs.

So that's an important area. I think when we look and try to come up with a strategy to enhance the human capacity, for example, you have to have also in the long run, okay, these people will be employed, they'll come back. How can we ensure that they are in a position that will benefit their people.

So some kind of strategy should be in place so they are retained in the same institution for at least let's say five years or six years. It has to be done in a way that is with commitment from their own government that this will be the case.

So you have to have instead and you have to also be aware of the brain drain issue because they are at a level of education that can be utilized elsewhere, but we have to make sure that they are providing the knowledge required that they were trained for for a specific area in advance of them going anywhere.

So the brain drain phenomena, retention of these important people in helping their own people and having the infrastructure in place and the economic means to pay their salaries, for example.

So if you are with DAI that's something I think your organization can really plan as you submit your next RFP. *[Laughter]* Yes.

Audience:

Adrian Ngasi with Bureau for Policy of USAID. I have to make a comment and probably add a little bit more from what you said when you got to lessons.

I think what we have seen from Brazil, first of all, the characteristic of Brazil's agriculture development is very different from that of Africa. One, Brazil has a large _____ population. So a smaller number of people involved in agriculture. Then the issue of commercial farmers in Brazil. They have much larger commercial farmer sector where in Africa has peasants, which it's very difficult to either adapt technology, get financing, land issues and so forth and so on.

For us, I think, for USAID, the lesson here is you cannot ignore the commercial sector, which is important technology transfer, access to the financial sector that will cut a _____ sector, as well as the political economic of agriculture in Africa is very different. If you have studied African politics, agriculture was I should say intentionally killed in Africa so that it couldn't bring the political change.

So when we look at agriculture now, we still focus on helping peasants in Africa and then we put investments that are no longer going to be adopted on a long-term while there's small scale commercial farmers, too, who could help in disseminating technology, bring up the financial sector for agriculture to access resources.

We tend to forget also that, for instance, Zimbabwe is a very good case in point. Only 4,000 commercial farmers held the economy now. Those 4,000 farmers cripple and the whole economy crumble. You cannot help put peasants to bring about agricultural change in developing countries, particularly in Africa. It's very complex and needs more careful consideration.

Z. Baquet:

With that, thank you for joining us for Ibrahim today and just want to thank Ibrahim for joining us. Thank you very much. *[Applause]* As always we appreciate you taking the time to fill out the evaluations which are for you in-person. It's on your chair and we have a link online.

I would just like to highlight the upcoming events. We have a special seminar by IFPRI and MSU, Michigan State University on food policy on March 13th. Those invitations I think will go out sometime today or early tomorrow.

We have an AgExchange, sort of an online forum discussion around knowledge sharing and learning in the ag and food sectors in development. That's going to be March 20th through 22nd. Then March 28th is going to be the next Ag sector council where we're going to be talking about knowledge management issues around agriculture and food security. I hope you will join us.

All these resources will be available up on Agrilinks so please visit Agrilinks. We will send out an e-mail for everyone who's RSVP'd about the resources when they become available for the screen cast.

Thank you very much. Have a good day.

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