



Setting Investment Priorities for Achieving Poverty Reduction and Food Security

Presentation Transcript

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**Presenter:
Shenggen Fan, IFPRI**

**Facilitator:
Zachary Baquet, USAID Bureau for Food Security**

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Zachary Baquet:

Good morning, everyone. Welcome to this month's Ag Sector Council. We're being joined today by Dr. Fan, Director General of the International Food Research Policy Institute. I'd just like to make a couple of quick announcements and some just rules of the road. If you could, please silence or turn off your cell phones while you're here so we don't have interruptions. Also, during the talk, please save questions until the end when we have Q&A, because our online participants can't hear if someone here is not speaking into a microphone, so please save them until the end so that everyone can participate. I'd also like to note that tomorrow we have another event; this one will be taking place at QED. We'll also be on webinar. QED is located at 1250 Eye Street, Northwest here in D.C., on the eleventh floor. This one is going to be talking about land issues in Africa and the impacts on food policy and food security, so please join us for that one. We'll have Thomas Jayne from Michigan State University, and then also Karol Boudreaux from USAID's land tenure team speaking.

We also are going to have a one-day conference/workshop around the agricultural biotech program run out of USAID's Bureau for Food Security. That will be taking place on June 5. It will be all day, but it will also be on webinar so you can join us online for that. Please check out Agrilinks for information on these events and other upcoming events, and please feel free to join Agrilinks and participate with the conversation online, too. With that, I would like to introduce Julie Howard, who is the chief scientist and senior advisor to the administrator here at USAID, who will be doing the introduction for Dr. Fan. Thank you.

Julie Howard:

Thanks, Zachary, and welcome to all of you for this important discussion on setting investment priorities for food security and poverty reduction. It seems like really incredible timing that, Shenggen, you should be with us to discuss this topic hot off the G8 discussions, where we were discussing exactly this, what should G8 priorities be in this area over the next ten years. We're facing some pretty hefty challenges over the foreseeable future. We've got 1.4 billion people, at least, living in extreme poverty. We've got the additional challenge of really needing to increase our production by 70 percent or more over the next 50 years, and we have some other sort of challenges. We have climate change, food price volatility, things that are affecting smallholders and rural dwellers on a day-to-day basis. So, we have some good kind of opportunities, as well. I think in much of the developing world, we are seeing kind of a rebirth, a resurgence of interest, private-sector investment, and interesting kind of private-sector investment, where companies are looking at what kind of investments they might make to touch the lives of rural poor and to increase their incomes.

We have some challenges and good opportunities, also, sort of in our increasing recognition of how tightly bound up poverty and nutrition are, and sort of challenges in addressing those jointly, along with looking at some of the environmental challenges that we have, so sort of a trifecta of challenges and opportunities. I think what's fairly certain for the foreseeable future is that we'll have, we hope, steady but possibly declining public-sector resources to deal with these enormous challenges, and so it's wonderful to have Shenggen Fan with us today because he's spent most of his career, possibly much of his life thinking about these challenges. Shenggen and IFPRI have been, of course, an incredible thought partner always for USAID, and Shenggen, in particular, since you have joined IFPRI as its director in 2009, we rely on IFPRI more and more.

So, Shenggen grew up in rural China during a time of immense transformation in China's own rural sector. His Ph.D. at the University of Minnesota. He is the recipient of many, many awards. At IFPRI, he has directed IFPRI's program on public investment, so he has done a lot of research and thinking himself about how to strategically prioritize public-sector investments in rural space, and then, following that, he directed IFPRI's program on governance and development strategy before becoming IFPRI's director. So, Shenggen, we're very much interested in what you have to say. It's very timely. Thank you.

Shenggen Fan:

Thank you, Julie. I don't think I need this, do I? Well, thank you, Julie. It's really a great pleasure to see some of the friends here. For the last several years, IFPRI has been working very closely with USAID as a partner to really, really push global food security and nutrition security to very high in the global development agenda. So, what I'm going to do here today is to look at the investment priorities, so I have several key messages here. The first is donors and the national government have really increased their support to food and nutrition security, so we have seen a movement for the last three or four years, particularly after the 2007-2008 food crisis. So, donors, national governments are really committed to agriculture. While more support is important, it's a very critical _____, but investment priorities are equally important, if it is not more important.

From our study, and from my own study, Julie stated that in fact I spent most of my research career on investment issues, so how to measure the investment, how to assess the impact of different types of investment in terms of the economic returns, in terms of their poverty reduction impact, and impact on malnutrition. Our conclusion shows that investment in agriculture R&D and early childhood nutrition have very high returns, the highest returns among all types of investments. Finding reliable data and a strong capacity are crucial for

monitoring trends and then to analyze priorities, so some of our studies use very crude data. We have to use certain innovative ways to guesstimate many data required. I think, as we move forward, we really need to improve the data quality, the mechanisms to connect the data, to monitor, to track the progress, and then to continue to analyze the priorities, because the priorities are very dynamic. Today's priority will be very different from tomorrow's, and obviously very different from 20 or 30 years ago.

So, renewed attention to agriculture, and more support to agriculture food and nutrition security. You have heard that during the G8 meetings. President Obama mentioned food security, nutrition security five, maybe even ten times. I remember during the Chicago council conference on Friday about two weeks ago, and it was just so exciting to see a president of a very large country mention food and the nutrition security, and I have been traveling around the world, and it's the first time to see that excitement.

In addition to donors and national governments, as Julie stated, the private sector, the philanthropic organizations have also increased their investment in agriculture and food security. I will touch on this issue a bit later. So, increased donor investment. This chart shows you the ODA to agriculture by OECD countries. You see it is like a roller coaster. Around 1970, the donors spent about five to ten percent of their total aid on agriculture, and that percentage increased to 15 to 20 percent around '82, '86, then the trend really has come down dramatically, particularly after 1990. So, in the 1990s, we _____ 1990s. The donors have really reduced their support to agriculture. The good news is in the last several years, particularly since 2005, the donors has begun to increase their investment in agriculture, as a share of total ODA, right now it's about five to six percent. We really argue that the OECD countries should also commit at least 10 percent, if not 15 percent of their ODA to agriculture. African leaders committed 10 percent of their national budget to support agriculture, and during the Green Revolution, a period in Asia, like China, India, Vietnam, they spent 15-20 percent of their national budget on agriculture.

The rising public investment on agriculture over the decades, you will see in many parts of the world, particularly in Asia in the '80s, this country spent ten percent of their national budget on agriculture. India spent 15-20 percent of their national budget on agriculture in the '60s and '70s, although that share has declined. But, as a percentage of agriculture GDP, that trend has increased. One of the reasons is the share of agriculture sector in total economy has declined. So, you will see the intensity of agricultural investment has increased over time, from 9 percent in the '80s to 7 percent in the 1990s, and today it's 11

percent, 12 percent, even 13 percent. _____ Africa is one of the areas, one of the regions we really needed to pay attention to.

Today, the percentage of their total expenditure in agriculture is about six percent, compared to probably four percent back in 2003, when African leaders made a declaration in Maputo to use ten percent of their national budget to support agriculture. So, some progress, but more needs to be done for Africa, and particularly in terms of the percentage of agriculture GDP, many other regions have increased their intensity, but not Africa, because the share of agriculture sector in total economy is still very high, very strong, although the share of the national budget in agriculture has increased. But that increase has not been matched by rapid growth in agriculture sector, so GDP agriculture, GDP growth in many countries have increased by six percent, seven percent per year.

Look at the figures in China and India. For China, from 2006 to 2012, the government expenditures on agriculture increased by five times. India, the growth is not as fast as China, but the spending there has also increased substantially by three times, from 2005-2006 to 2011-2012. So, if you look at the whole world picture on the agriculture investment, government investment in agriculture, these two countries really dominated growth in the last five or six years. _____, as I mentioned, the African leaders really committed themselves to use ten percent of their national budget to support six percent agriculture growth. As I see, it's also a movement. I have seen many African countries have really increased their investment in agriculture, and 29 countries have signed compacts, and 23 countries have prepared investment plans. So, the G8 commitment will use some of these plans to really set the priorities, to set sort of mechanisms to really align the G8's priorities to countries' priorities.

From 2003 to 2009, about seven or eight countries met the Maputo Declaration target that's ten percent. Well, this is the average from 2003 to 2009, so on average, six countries have achieved ten percent target, so those countries include Burkina Faso, Niger, Ethiopia, Senegal, Mali. However, if you look at the recent figures, it's not just average. The figures in 2008-2009 _____ more than ten countries have exceeded ten percent target, so tremendous progress has been made, but more needs to be made. For example, look at some of the countries on _____ side. The majority of the countries still spend five percent, four percent of their national budget on agriculture, where five percent is _____, so I think actually half of the countries spent less than five percent of their national budget on agriculture.

Now, more support obviously is important. There's another movement I have

seen at the global level. G8, not only this year, G8 in 2009, they committed \$22 billion, \$23 billion to support food security, particularly to support smallholders' food security by helping the countries to develop their own strategies, their own investment plans, so that was a good commitment, but it's very important to move that commitment to actual implementation. So, today, just from our own estimation, less than half of that money has actually been implemented, so \$22 billion or \$23 billion. Different figures come out from different groups. Certain groups said only 25 percent, and certain groups say it's less than 50 percent, but the bottom line is the G8 countries have not really met the commitment they made in 2009.

Now, G20, it's not just money. I think it's a partnership. How the G20 countries can work together better. The G20 countries, G20 group include some of the large food producers and the consumers and the traders – Brazil, China, India, and Indonesia. So, more important, it's a partnership, how they can work together to refrain trade export events, avoid speculations, and refrain the bio-fuel production and set up certain grain reserves, and B20, I should say _____ are not _____ anymore, _____ old and _____, so B20, the business community, have also set up a group to work together and to use their investment to support food and nutrition security. IFPRI is part of the B20 group to provide knowledge information to support their commitments. In April, the group went to Mexico and met with the Mexican president and presented their commitment and their statement to Mexico G8 group – sorry, B20, G20 group – and some initiative, they're _____ nutrition, focusing on children under 1,000 days from the pregnancy to second birthday, and a global food and agriculture security program, the World Bank, under the World Bank leadership just last week, they committed support to a bunch of new countries in Africa, as well as in Central Asia and the rest of the world.

The World Economic Forum has really become a global platform, where global leaders come together to share information, to improve the transparency of their operation, and I've found the World Economic Forum is very, very critical in terms of creating some sort of informal network for different stakeholders to interact with each other. In fact, it is during the World Economic Forum the business communities came together and developed a vision for agriculture, a new vision for agriculture for business communities, and Feed the Future, I don't need to say anything about this program here, you know better than I do, but the priorities of investment are equally important.

These just are some of the figures from G8 commitment, shared commitment between G8 African countries and the private sector. The \$3 billion _____ 50 million poor people out of poverty over the next ten years, so we do have

some concrete measures, and scaling up on nutrition was also part of the G8 declaration. Finding the support for bio-fortification, crop _____ and related technologies, IFPRI is leading a program on bio-fortification supported by the Bill and Melinda Gates Foundation, the U.K. Department of Development, USAID, so it's a very exciting program. I'm glad that G8 actually mentioned this program specific.

All right, so priorities matter, and _____. This chart shows returns to different types of investment over time in India in the '70s, '80's, and the '90s, so you will see the priorities change over time, priorities differ across different types of investment; priority also differs depends on your objective of your investment, whether it is returns for agriculture growth, whether it's returns to rural poverty reduction. A couple features here from this table. One is returns to rural roads, returns to agriculture research are very high compared to any other type of investment. In fact, in terms of agriculture GDP, or agriculture growth, agriculture research investment had some of the highest returns, but in terms of poverty reduction, it's the rural roads. This is because rural roads affects poverty reduction not only through agriculture growth, but also from non-farming employment, through migration, and through many other different channels going beyond agriculture, but the whole picture does not change.

The returns to roads to agriculture research are very high, and they are very high in the '60s, '70s, they are very high in the '80s and the '90s. I guarantee you they are also very high today. However, if you look at _____ investment or the subsidies, irrigation subsidies, _____ subsidies, power subsidies, credit subsidies – now, in Africa, there is a debate whether countries can use _____ subsidies as a silver bullet to solve the food security problem. Our study from India shows that in the very initial, returns to these subsidies actually are quite high in terms of growth, in terms of poverty reduction; however, as the times moves, these impacts comes down dramatically, so the effects come down dramatically. This is because, in the very beginning, certain subsidies would help smallholders to adopt _____, to adopt new seeds, and got to use irrigation, so the market would not be able to do that. So, to me, it's a way to correct a market failure; however, as the times move, the subsidies begin to increase, and then the political interests begin to form. So, the subsidies continue to increase, and then their marginal return comes down dramatically. So, in fact, in the '90s, most of the subsidies have very small returns, almost zero returns, statistically insignificant impact on agriculture growth on poverty reduction.

Similar findings came from China. The returns to R&D is very high. In fact, _____ one donor or one _____ investment, the return could be ten, it

could be seven. It's a very high return, so usually you have one donor investment, two donors return. That's just a tremendous return. If you're investing in Wall Street, you're not going to get these returns. Education here comes out very strong. Rural roads also comes out here very strong. Education comes here very strong. It's mainly because the migration and the rural non-farming employment. The education was critical for rural young people to move to cities, to set up business in the rural sector, so that's why the returns to education investment are quite high, particularly in terms of poverty reduction.

Another feature of this study is this great, great regional difference, particularly in some of the marginal _____ areas, or in some of the _____ areas, Western China. So, Coastal China is _____ – Shanghai, Wenzhou, Beijing – so these provinces and cities are in Coastal China. Now, Western China is _____ development of poor infrastructure, poor education, but from economics terms, marginal return to investment in Western China actually are very high, particularly in terms of R&D investment, in terms of education, and clearly into the poverty reduction impacts will be much greater in Western China because the majority of the poor, hungry people are concentrated in Western China. So, when we move to Africa, do these findings hold in the region? So, we launched a couple of studies in Africa – Tanzania, Uganda, Ethiopia. So, this is a finding from Uganda. Returns to agriculture investment, again, is very high, so everyone shilling invested, more than ten shillings will be returned, and in terms of poverty reduction, agriculture research, again, also has very high impact. There is a great, great regional variations, both in terms of their impact on agriculture growth, and in terms of poverty reduction.

Impact in Ethiopia, so again, the results show that returns to rural infrastructure is very high. It's the highest, several times higher, than the second largest return from education. But without roads, then the market will not work, extension will not reach to farmers, and you cannot move your produce out, and there is a great variation across regions, as well. But, surprisingly, we found that the investment in agriculture didn't show a very high return. Many reasons. One is probably inefficiency of agriculture spending. Another reason is we did this study back in the _____ this millennium, 2000 to 2001. We know that in the last four or five years, the Ethiopian government has really increased its investment in agriculture research, in extension, in improving irrigation. So, if we re-do this study, the results may come up differently.

So, this is a summary table from different studies, different countries, different regions – Ghana, Uganda, Tanzania, Ethiopia – _____ African countries, China, India, Asia, and Thailand is another country from Asia, so the conclusions remain. The conclusion hold. Returns to agriculture investment are very high,

not only in terms of their growth, but also in terms of their poverty reduction. Returns to roads are high; returns to education are also very high. Now, the new study just came out from so-called Copenhagen Consensus, a bunch of economists, probably the best economists in the world – Nobel Prize laureates – rank different type of investments using documents prepared by different institutions. IFPRI prepared a document on the returns to agriculture research investment, returns to investment in improving childhood nutrition, so back when paper was prepared.

So, these economists rank fighting malnutrition among preschoolers as number one, so they think this investment has highest return, although it's different from our own study, because we didn't include any nutritional impact in our study, so we cannot make a judgment from our own study. _____ increase agriculture output yearly enhancement through agriculture research also has a very high return. So, their estimates are much bigger, much greater than ours, so normally we would have 1:10 or 1:5 cost benefit ratios, but these economists says that one donor investment, the returns could be 30 in the case of reducing malnutrition for children, and 16 in terms of agriculture productivity improvement through R&D. So, I reviewed that document, and one of the reasons probably they have taken into consideration of the climate change impact, of other social economic impact that we have not taken into consideration in our own estimation. So, capacity building is so important in doing this, so IFPRI and our partners have done all this estimation. Copenhagen Consensus group have also used the background papers. Don't forget, all these papers, all this work are done by international organizations or done by institutions in the north.

So, _____, one is the lack of reliable data. We've got to work hard to improve our data collection in public investment, so better reliability, and also timely collection of the data, because sometimes the data are two or three years old. _____ to the capacity in policymaking and strategy formulation, so many countries lack capacity in formulating their investment priorities, even they have information, even they have knowledge about the returns to different type of investment. So, _____ capacity in setting investment priorities and designing our investment plans. Most of the 23 investment plans prepared for CAADP had enough help from many institutions – FAO, IFPRI, universities here in U.S. I really hope in the future these plans should really, really be prepared by their own analysts. Lack of research support for policy, we know that universities, think tanks in Africa, in South Asia are very weak, and the absence of _____ systems. When the investments are made, we need to track, monitor the impact, the progress and use that as a management tool, use that as a tool to reprioritize investments.

So, IFPRI is doing some limited work in Africa. For example, a program called AGRODEP. We formed a network of researchers, particularly _____, in Africa to really frame agriculture in a much broader context for agriculture, using the economy-wide modern structure to put agriculture in a broader, broader framework, so agriculture growth where contributed, overall economic growth, overall poverty reduction, overall food security, so going beyond agriculture, in the meantime, linking to very detailed data from the rural households, and the ReSAKSS, our ReSAKSS is an initiative created by IFPRI and other CGIAR centers to support CAADP implementation. So, we started this work in 2004-2005, right after the Maputo Declaration.

So, we set up this initiative to track and monitor the country's commitment to use agriculture to support agriculture growth, to support poverty reduction, and a guide to set up a country's notes right now, so we are moving to the country now. We're not only at regional now, or sub-regional now, but we're also moving to the country to help the country to set up this knowledge information system. So, ReSAKSS indicates, or it means Regional Strategic Analysis and Knowledge Support System, and providing tools for policymakers, policy analysts, and help the CAADP to develop M&E framework, and we also produce annual trends and outlook report. So, some of the figures from Africa that show their trends of their commitments to agriculture came from _____ initiative.

So, in conclusion, increased support is important. We've got to keep the momentum, but investment priorities are equally important. So, if we don't set the right priorities _____ sometimes total investment will not come, so we waste our money. It's very difficult to convince investors to give more money, and investments in agriculture R&D and early childhood nutrition have high returns. I'm glad that the U.S. government is really pushing this technology platform for Africa to link African REKSS system with some of the private sector, some of the universities here in U.S., and reliable data and a strong capacity are crucial for monitoring trends and to analyze priorities. So, if we wanted to align our priorities – G8 priorities, G20 priorities – to country plans, country priorities, the country have to have that capacity to set the right priorities. Otherwise, we align to the wrong priorities. Thank you.

[Applause]