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### FALK AUDITORIUM

## ENDING RURAL HUNGER: A STOCKTAKING ON WORLD FOOD DAY

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### PROCEEDINGS

MR. KHARAS: Good morning everybody. Could I encourage you to take a seat and we'll get started. My name is Homi Kharas, I'm the co-director of the Global Economy and Development program here at Brookings. I wanted to welcome all of you today to talk about hunger on World Food Day. I know that many of you have been following the discussions last week around the annual meetings of the World Bank and the IMF. And there was a great deal of talk, but very little of that talk, I have to say, was actually about hunger and things that directly affect individual lives. So, we thought it was useful to really try to focus on that aspect. What I'm going to do is give you a very quick overview of some facts and then invite a panel up here so that we can have a discussion about some of the issues that come up.

So, the basic message that I wanted to give is actually quite straight forward. It is that the world is really off track to end hunger. For the first time in a very long time, the number of undernourished people actually went up rather than going down. It now stands at somewhere just over 800 million people who are undernourished by FAO data. The promise is to get that to zero by 2030, so you can tell there is a fair way to go. If you look at other indicators like stunting, you see some modest decline. But if we take the rate of change of stunting and say, how long would it take us to get to zero, it would be 42 years. So, we have to do something to basically accelerate the rate of change. When you look at what is actually happening to agricultural productivity in food production in many of the poorer countries, you see that it's flat. You still have 65 countries in the world where cereals production is less than two tons per hectare, at less than two tons per hectare you're basically just eking out survival.

So, hopefully just in time, there is a pretty picture that I wanted to show you. Here's the picture. This is a gallop pole data. They have been asking the same question for a decade or more about whether there have been times in the last 12 months when people didn't have enough money to buy food that they needed. What you see, obviously, that in low income countries, it's somewhere around 60 percent. It is slightly less in middle-income countries at 30 percent. What is quite interesting to me is that even in advanced economies, it's also quite high, it's somewhere around 10 percent. Now, remember there are about a billion people in advanced economies so 10 percent means 100 million people going hungry in the rich countries of this world. So, hunger is a universal thing, it is quite this pervasive. The thing I want you to take away from this picture is there is no evidence of any improvement over the last

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decade. The world has become considerably richer, the issues of hunger have not become appreciably smaller.

So, then there are a number of things on the policy side that we can look at to say well, maybe there is just a lag, that policies are improving and things will get better in the future. So, we looked at what FAO called the agriculture orientation index, it's moving in the wrong direction. We looked at what's happening to food markets across the world, they're going in the wrong direction. More non-tariff barriers last year than before. We looked at what is happening to agricultural subsidies. They're still averaging something like upwards of \$500 billion a year. It's an important number because it gives you a sense that this is not about just money. There is money being spent on these issues, it's just being spent in an extraordinarily inefficient way and a very untargeted way. And the only bright spot that we found was that there was a commitment made in Nairobi at the WTO Ministerial for all advanced countries to eliminate their export subsidies on agricultural goods. In May, Australia became the first country to actually live up to that commitment. As far as I know, the only country as of yet.

So, here's a charge of what's happening to subsidies in the world. What you see is that gradually and slowly, the OECD countries are actually reducing subsidies. But China, which is emerging as a major player in world food markets, has ramped up its level of subsidies enormously. So, you add the two together, you're still at levels which are upwards of \$500 million as I said before. And then we took a look at resources. The biggest resource for agriculture is private credit. There is no data on some 70 plus developing countries. Private credit for agriculture is flat. In those countries where we do have money on government spending, it's actually going down, not up. When we look at ODA, there is maybe some slight increase in commitments and disbursements but it is very, very modest in scale.

When you look across countries, those little dots are needs, the bars are the amounts that are actually being spent on food and nutrition security as a per person living in rural areas. We focus on rural areas because these are where the problems are most grave. And what you see is they vary enormously. So, you've got a whole range of countries where in total, public, private, everything, they're spending less than \$10 per year per person on food and nutrition security. I submit that at that kind of level, you're very unlikely to see any change. And then you see a number of countries which are actually making progress but they're spending \$300, \$200 and \$300 and upwards, per person per year and they

are seeing some significant improvements. So, I just want you to think about the contrast between these two numbers because it gives you some sense of the degree of scale that might be needed in order to change these trajectories.

So, the takeaways, we've got a massive problem, it's getting worse. Policies haven't improved, resources are flat at best. When you look internationally, what you see is that as food prices have started to come down from their peak, so has donor commitment meaning their aid going to food and nutrition security. So, it looks as if nobody is actually really worrying about this problem and we've got some thoughts about how you improve accountability. We think it starts with better data and I would say that unfortunately, we still have data that is constantly being revised, that it is several years out of date. People aren't even trying to use modeling frameworks to get to the most recent availability. Governments have plenty of food and nutrition security strategies. It's not like they lack for strategies. In some of the case studies that you can pick up and that is on our Ending Rural Hunger website, you'll see this listing, in some instances, four, five, six different strategies. But it seems to be the strategy for every moment. Some donor asks for a strategy. There is something called the zero hunger challenge or initiative, he has a strategy for that. Something called Cat app, he has a strategy for that. They're not integrated, they're not followed through, they're not implemented in any systematic way.

When it comes to developed countries, the last commitments they've made was at the G-7 in Luckwila. Those expired in 2010 and since then, no commitments, therefore no accountability. So, there are no commitments on money, there was a very vague statement by the G-7 in Germany at Schloss Elmau saying we're going to help 500 million people, lift 500 million people out of hunger, but no action plan. So, what does one make of that kind of statement? So, that seems to me to be a little bit of where we actually are today. Now, I'd like to invite our panel to come up and join me on the stage and we'll have a bit of a conversation about it. Thank you.

As they come up, let me introduce them. John McArthur, is a senior fellow here at Global. He was heavily involved in the Millennium Development Goals, now in the Sustainable Development Goals and has been doing some work on Canada. As an example of how even in developed countries these issues are pertinent and, of course, as a co-author of the note that we produced on this stocktaking. On the far end is Asma Lateef. Asma is the director of Bread for the World.

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This is an institution that is probably the principle institution which is advocating for U.S. leadership on food and nutrition security. The U.S. has historically been a leader in this space amongst advanced economies with a signature program of the last administration called, Feed the Future. The U.S. passed a Global Food Security Act that integrated nutrition and resilience and other kinds of things into their programs last year. And maybe we'll talk about the impact of that kind of legislation which also will need to be renewed at some point in the not too distant future. Next to her is Paul Winters. Paul is the vice president of the Strategy and Knowledge Department of the International Fund for Agricultural Development. IFAD is one of the Rome based agencies that actually invests in food and nutrition security. It is the principle long term investor in these areas outside the World Bank Group but it is the only agency that is explicitly focused on the long term issues of food and nutrition security. IFAD is now producing annual reports, the last one coming out of Paul's shop and the last one was called, Fostering Inclusive Rural Transformation. They are very much an organization that has emphasized the transformation of rural areas as part of this program. And closest to me is, Eyerusalem Siba. Eyerusalem is a fellow in the Africa Growth Initiative which is part of Global here at Brookings. Everusalem has been coordinating all of the country case studies of African countries that we've included in our projects. Thank you all very much for being here.

Asma, I wanted to start with you and start by first asking you, do you at Bread for the World, actually share this rather dismal prognosis of where we stand and are there any bright lights that you see? Things that can give us some hope for optimism in the future or is your message also that things are really not going all that well and are actually getting worse in many areas.

MS. LATEEF: Thank you very much for having me and for having this event on World Food Day, it's really exciting to see everyone here. Generally, Bread for the World has been quite optimistic about the progress that has been made. In 1990, one in four people on the planet was hungry and not it's down to one in nine. So, that's not something we should take for granted, it's significant progress. But over the last several years, we have been, as we think about the SDG agenda and achieving SDG too, it has pushed us to really focus on how do we accelerate progress. Because the people who are suffering from hunger now are living in much more difficult situations and the challenges are much harder to overcome. And over the last year, the issue of conflict is become much more visible.

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So, the challenges are that in the next several years, the majority of the world's hungry people will be living in fragile context. So, that does mean that we need to do things very differently.

In the U.S. context, the U.S. has been a leader and there is strong bipartisan support for global food security. The Global Food Security Act passed with very strong support on both sides of the aisle. Funding levels were bumped up after the food price crisis but they're certainly not where they need to be. And the current budget proposed to slash funding for food security and nutrition. One of the things that is sort of emerging through the Global Food Security Act that the bipartisan support, I think you will find strong bipartisan support to continue to fund these activities moving forward, perhaps not at the levels but we are definitely helping shore up the champions on The Hill and really encouraging that they don't cut these programs.

A few other bright spots, if you will, the new administrator of USAID, his first trip right after he was sworn in was to the countries that are in near famine conditions. I think that sends a very strong signal about his priorities. He has also been talking a lot about helping countries transition. So, I think there is an opportunity really to situate these issues, food security and nutrition, in terms of being foundational to countries transitioning out of aide. Investing in the human capacity of the country that is critical then to a proper and sustainable transition out of aid. I think those are really important conversations that Mark Green has initiated and I think as a development community of food security and nutrition community, we really need to engage that and position food security and nutrition as being central to that long term goal.

Governor Beasley is now the head of the World Food Program. We've got now a very vocal and energetic champion for SDG two who is a former governor of South Carolina and I think he can speak to the Republican members of Congress, this administration, in ways that, perhaps, the rest of the development community may not be able to. So, I think there are some opportunities. The challenges are huge. You are really right to point to the hurdles ahead. I think we need to think about doing things differently. Every dollar that we invest, has to be playing multiple roles. We have a multisectoral global food security strategy, we've got a multisectoral nutrition strategy at AID, whole of government coordination plan here in the U.S. that is really looking at resilience and nutrition and agriculture and gender. But operationalizing that and really making it meaningful integration at the country level, at the

community level, I think those are where some of the challenges remain.

MR. KHARAS: You talked about Mr. Beasley who is head of the food program. But the World Food Program is a humanitarian organization. To some extent, I wonder whether we're falling into the trap of thinking about food and nutrition security just as humanitarian relief. We want to stop people from starving to death, obviously. But if we just treat those symptoms, we're never going to get out of this recurring set of crises, et cetera. What about the long term investments in the transformations that people talk about?

MS. LATEEF: I mean, I think that is a risk with the spotlight focused on these four countries and potentially more countries coming online. That is a risk but I think it really behooves us, given that we have a framework that is much more than humanitarian. We've got a framework that looks at the long term development pieces as well as the humanitarian. We have to get better at bridging. One of the things I found a bit heartening is seeing FAO, IFAD and the World Food Program all engaged in this conversation about what to do in these four countries. I think Graziano da Silva has made the point that if we don't help people in those countries to plant for the next harvest now, we will have a much more expensive humanitarian effort next year.

So, I think we have to think differently about bridging that gap between humanitarian and development and really helping most of the people affected by these near famine conditions in rural areas. So, how do we get smarter about the kind of assistance we give them and not just air drop food but help them wherever they are if they're displaced or whatever. They have the skills and help them get back on their feet more quickly.

MR. KHARAS: Eyerusalem, let me come to you because you coordinated a number of country case studies. None of them were in the crisis countries and what was slightly shocking to me was to see, we all know that we do have food and famine or near famine conditions in a number of countries. There is a sense, well maybe this is driving this global data that we see. But actually, in every one of the country case studies that you looked at, you also see no evidence of any progress at all. This is seemingly a deep structural problem in many, many countries.

MS. SIBA: First of all, thank you for giving me the chance, not just to sit here but also to give me the opportunity but also for letting me speak to the express on the ground to know that on the

ground challenge they're facing food and nutrition security. We started this project by looking at the (inaudible). So, almost all the countries were looked at, Nigeria, Senegal, Tanzania, Uganda and Ethiopia. Except for Nigeria, one of the major challenges they are facing is agricultural productivity gap. And then we looked at which of the countries were more food secure. What are their characteristics? And we found mostly that those countries were focused on improving their productivity actually managing well in terms of finding better food and nutrition security.

There are differences within the society other than improving agricultural productivity. We found that children, women, most important food producers are highly affected by food and nutrition security. Of course, conflicts affected in regions of country that always negatively and highly effected by food and nutrition securities.

So, it's not really enough to address productivity gaps even though to manage through productivity within these countries we (inaudible) malnutrition is the next biggest challenge. So, for example, the country that is closely looked at, Ethiopia, there are regions who are food secure but not necessarily nutritionally secure. So, it was surprising for us to find that actually food producers are the most affected by malnutrition and issues with diversity of food consumed.

Really, the takeaway message we found from these studies is not just farm based interventions that work but also holistic approach and also looking at the entire value chain of the agriculture. Not just the farm but where the markets, are the functioning, are there market failures. Do farmers have, for example, storage capacity to store their produce in times of excess production and then sell it when prices are higher? So, do they have the information or the knowhow where to find, where to locate their markets and also, for example, urban consumers, those who buy their foods tend to me more secure than food producers in rural countries.

So, some of these issues in addition to resident issues, environmental shocks, we need to think about how to structurally transform the agriculture section. So, based on the discussions I had with on the ground stakeholders, there is like a wish on the ground from these people that agriculture is transformed from substance to a sector driven by entrepreneurs. Most seem to have been farmers, the real risk takers, the ultimate risk takers in entrepreneurs of these countries. We need to have a power shift, a change of mindset from the thinking farmers as recipe and subsidies and many other handouts

into a market or a sector where these are ultimate entrepreneurs and risk takers. We need to support them in terms of assuring them again shocks.

MR. KHARAS: Fine but if you want to have that kind of transformation, you probably also need some kind of investment. All of these countries have signed on to the Mailable Declaration. They've all committed themselves to spend 10 percent of the budget on food and nutrition security and none of them are even approaching half that level. It is one thing to talk about this, it's something else to actually implement. What's the sense of, why is it that despite commitments at the leader's level in all of these countries, nothing really seems to change, at least, in terms of public investments, in agriculture and rural roads and warehousing, all the things you talked about.

MS. SIBA: So, I want to shift the discussion on resource from the resource spent either by the national governments or the (inaudible) to really think about first, the composition of the resource, the share of the resource, where are they coming from. Is it from the government itself or from (inaudible)? Just to give you an example, Senegal, is one of the countries with the highest intensity in terms of resource spend and financed by the government itself but they are not necessarily the lowest in terms of needs. So, some of the argument there is, we need to think about inefficiencies, how we spend the resources and also where we spend them. Is it on subsidy or is it on addressing long term issues in agriculture. Ghana, for example, is a country we saw where most of the food and security nutrition security agenda is driven by excellent resources. The challenge there is that now that they are graduating to low middle-income countries, they need to figure out how to mobilize their own resources within their own means.

It seems to be the case that those projects, programs funded by external source, they seem to perform better but scaling up those successful projects is going to be a challenge if the national government itself is not going to scale up and fund those projects. The trend is the agenda, the food and nutrition security agenda, is mainly driven by national resources. We see that the policies are also performing well, agricultural policies, enabling condition for women assistance. They tend to go to national resources spent on food and nutrition security.

On the other hand, the higher the share of external resources, we see that these countries perform better, for example in rural assistance and nutrition security. So, even among these

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countries which are more successful, it seems to be the case that nutrition security, even when they address the food security, agricultural and transformation is going to remain and that's also mainly because of awareness issues and diversification and things like that. So, beyond that what are resources spent, we need to think about the share of resources, the composition and also to monitor the investments, are they making an impact.

MR. KHARAS: So, Paul, I think that a couple of challenges for you as an external agency. One is, how do you actually get the country ownership and make sure that policies are right and second, how do you actually scale up? IFAD is a large organization but it's not a massive organization in terms of its investments. You are faced with a massive problem and challenge. How do you get to scaling up?

MR. WINTERS: So, for those that don't know IFAD, we are an international finance institution but we only focus on targeted programs for basically the rural poor. So, we loaned to governments but very targeted agricultural programs, rural development programs. This is the challenge that we face. We see that the problem is enormous, that we need to do something about it and we need to have more resources put into this problem.

I must say, up until recently when the SDG's came out, we knew all these challenges but it really didn't lead to any sort of change within the institution. We wrote papers that showed that we were linked to these things but without doing anything proactive, that has changed this year. That is largely for two reasons. One is, we have a new president that came in and has, he's Gilbert Houngbo, he's the former prime minister of Togo. Worked with ILO, UMDP and he has a different view of things that are much more results oriented. And the other, maybe even more important is that we're out getting more money. It's a replenishment year for IFAD and so the donors are putting tremendous pressure on us, asking us what are we going to do differently.

And so, to answer that question, I think I can describe it in three parts. The first is that historically, a lot of our operations are loans, really just drove what we did. We would have policy dialogue or discussion with government or country strategies, were largely based around, we're going to give you this in livestock or in irrigation, and we didn't think of it in terms of the broader landscape in which we're working. The new president came back from southern Africa and I was meeting with him

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right afterwards, and he was talking to our country program manager in Zambia and asked what role we had in the national policy dialogue. And the answer was, absolutely nothing, that we talked only about our individual operations. So, the first thing that we're doing is changing that and we're changing the way that we interact within our countries to make it much more focused on the policy dialogue drives what we do in our operations rather than our operations driving the policy dialogue. This means more decentralization of our organization so that is something that we just firmed up the plans last week. It also means changing the way in which we interact with government. More partnerships with other organizations working within the country and generally focusing much more on the engagement with the country.

That brings me to the second change and that is leveraging more resources. At the global level, right now we're almost entirely driven by ODA. What we are trying to move towards is more borrowing. So, we're borrowing sovereign borrowing, concessional partner loans and ultimately we hope to build towards market borrowing. Now, we have all these resources so if you donate a dollar to IFAD, it would be much better if that was worth \$1.50 because we could go out and borrow against the money that is constantly coming in. And this is what IDA has done with their resources and we're able to greatly expand their resources. So, if you think from a taxpayer's point of view, if I'm going to be giving money, it would be much better if it was leveraged in some way. So, we do that leveraging.

We're also under tremendous pressure to give more to lower income countries, lower middle-income countries and by borrowing, we can leverage our own resources and focus those much more on upper middle-income countries, the borrowed resources that we put on ordinary terms. Then also that leveraging at the national level, to work more with governments to get them to co-finance more on our loans to do reimbursable technical assistance. We have Saudi Arabia, Botswana and Chile right talking to us about providing technical assistance and their own projects will help target that. So, it's their resources that are being used but getting more co-financing with other institutions as well. So, the second thing is really trying to leverage, we have ODA, how can we make that become bigger by leveraging these other resources.

And then the third thing that we are really changing is much more focus on results. So, the SDG's have been laid out there and as I said at the beginning, we're primarily writing papers that

showed what we really did matches these in the hopes that that would be good enough. But we really need to think in terms of every single project that we put in, how is it mapping into the first two SDG's in rural areas, that's our focus. What is theory of change? The investment that we do in each of these and how does it actually link up to those and are we actually measuring it in our project and every project. So, we created a development effect in this framework that is improving our enmity systems within the project, so collecting data within the projects and then we're doing impact assessments of 15 percent of our projects. So, that's a rigorous where you have a counterfactual estimate of whether our projects have an impact or not and very much trying to use that to learn lessons and to push forward. So, given the enormity of the problem, it's basically a combination of trying to get bigger but also to be better and smarter in what we're doing.

MR. KHARAS: So, those are improvements and any organization, of course, can always strive to improve. But are we going to get to the SDG targets? I mean, how much change do you need to do in order to really get us there?

MR. WINTERS: Well, it requires a combination of those two things, right? It requires more resources be put into it and we do better at using those resources. And are we going to get the targets depends on how much more resources we have and whether we can continuously improve. I was meeting with the Gates Foundation last week and they have this SDG 2.3 roadmap that they put out. So, one of the things over the next four or five years they're trying to do is gather evidence. So, what they are trying to do is mirror what has been done in health and nutrition in which they start by gathering evidence and then they go to start coming up with metrics that show how things work, that's where we're trying to get to. And then trying to get donors to work together to work towards those goals. But this is what we broadly need to do is gather the evidence, try to get coalitions of people willing to work together and drive towards those particular goals.

MR. KHARAS: So, if we take this fundamental problem that we've got, I don't know 65 or so countries, where average levels of productivity are just miserably low. And that means that for many individuals within those countries, actual productivity yields are even lower, what are we doing to do to make them into modern farming enterprises.

MR. WINTERS: Well, it requires investing in technology and all of the things that we

know we need to do in which the technologies are largely available. A lot of it is a problem of access. There was discussion on some of the policies that are being used and many of them don't make any sense. There is a lot of fertilizer subsidies happening in sub-Saharan Africa which require huge amounts of budget but are actually not changing productivity. You're handing fertilizer and you can get higher yields from that but it's really not altering the fundamental nature of the agriculture. Those kinds of funds could be used in a better manner to increase productivity. So, I think we know what to do it's just, we're not doing it and the commitments of government is not there enough to try to push forward, things that increase that productivity.

MR. KHARAS: John, you've written a lot about fertilizer. Do you agree that fertilizer subsidies are not the way to go? If we don't subsidize fertilizer how are we going to get farmers to use more of it and increase their productivity?

MR. MCARTHUR: You know, I'm sitting here, Homi, and our job is to be kind of sober analysts at Brookings but part of me wants to pull my hair out. This conversation is so tiresome at a basic level. The fact that we're still having this conversation is pretty brutal, let's just be honest. So, yes there is progress happening on a global level in the big picture and the grand sweep of history. But the ratio of kind of conversation and policy effort to outcomes is so out of whack and the resources are so absent compared to what's needed and our bottom line here is the accountability is basically nonexistent. So, the details of fertilizer policy, there is one issue which is there are a lot of places that do fertilizer subsidies badly. There is another issue which is there is no country that has had a takeoff in the 20<sup>th</sup> century of agricultural productivity without a fertilizer subsidy. So, you've got to be smart about it, you can't be silly about it. That's like a lot of policies. You can do a bad policy, no question, but why don't we get smart about it.

In preparing for this, I was thinking, there are some concepts, just to reflect a little bit that we need to keep in mind which I would say have moved forward. There are some basic facts and then there is the need for a bit of inspiration. So, on concepts, when I looked, I did a pretty deep dive in economics literature about a dozen years ago. Let's just look at what we know in the field of economics about the role of agriculture and green revolutions in economic growth. Roughly speaking, it was an empty sack. The literature had basically skipped that topic for a generation. There were a few people

doing things here and there, (inaudible) people had done some things so you can give an exception to everything. But the basic premise, it was absent in the literature for a generation.

We have seen a lot of progress in the literature over the past generation. People like Luke Christiansen at the Bank, doing terrific work, showing how the returns investment in agriculture if you want to end extreme poverty, higher than most other things you can look at. We have the proliferation of randomized controls trials which low and behold, showed that people that use fertilizer get higher yields. Low and behold there is a demand curve and really poor people don't use fertilizer because they can't afford it. So, we have more and more evidence on this and that's actually good.

I was in Uganda, I remember, in 2005, with senior officials, talking about the need to invest in small holder agriculture with subsidies for things like fertilizers and this was heretical at the time. I was there this summer with the same officials, different context, they were talking about their latest paper on efficient subsidies for fertilizer. So, you can see how just papers, but you can see how the conversation has evolved. I also remember very clearly, I was at Tikka in Yoctoohm in 2008 in the middle of the world food price crisis. And Prime Minister Malice, who was basically berating the world, and other world leaders for not doing anything for the upcoming planting season, I had never seen anything like it. And African leader basically holding other leaders to account for not doing anything going into the crisis planting season and this was the politics that led to GAFSP. Now, GAFSP, Global Agriculture and Food Security Program, does that operate at what anyone considers global scale? So, it's global in the name but how many things have global in the first word but aren't global, a lot. And how many people think it's rapid response based on the upcoming planting season in each country, I don't know many.

So, these concepts are not flushing through the system into practicality. And again, just to be clear there is a lot of progress in places like IFAD, like WFP, the Bank, but we're not at the scale of practicality. So, we're now at a stage where at the World Bank have set a target. I'm just going to single out the World Bank because it drives me crazy sometimes. World Bank has set a target to end extreme poverty at least 3 percent by 2030. Okay, so what does that mean in each country, is that 3 percent of the world or 3 percent of each country. It should be 3 percent of each country in order to be serious or else we're going to say okay, it's fine for Nigeria and DRC to have a that extreme poverty, just a couple hundred million people over there. That's roughly what we're on track for right now. So, if it is 3 percent

for each country, what is the agricultural strategy for each country because we know in those countries, agriculture will be central to ending extreme poverty and ending extreme hunger because those things are connected. So, why don't we have the 3 percent target implemented for hunger and poverty in each country and why don't we have that be a centerpiece of each multilateral organizations policy advice to that country? Where even if the resources aren't available because IFAD needs more money. They can't do it on their own without more money.

And one of the big challenges is, we looked at this with a financial flow, the largest multilateral financing flows for food and nutrition security are going through organizations for which food nutrition security is not the number one priority. They'll get squeezed out in attention. So, how do we give attention at the practical level as a concept? I think that's got to be a centerpiece.

Now, just to hold other to account for a moment, recently FAO put out this very disturbing data showing that as we reference here, undernourishment has gone up, about 50 to 60 million people. I tweeted this. Owen Barter, head of Center for Global Development said in London, is this a real number do we know? Is this a strong number or a weak number? And I said, I'd love a confidence interval but let's ask FAO data @FOA data. Please explain. No answer. It's public, how can that be. How can we not even understand the data with clarity to within 50 to 60 million people at a time? That's not okay either. This is one of our key messages. The data systems need to be better so we are at least honest in how much we know. If we still don't know, let's just say we need to know, let's not pretend we know.

But I also want to talk about, I'll hold my home country to account for a moment, Canada. So, Canada just put out a -- before we put this up, actually please, hold that for a sec. Canada just put out its new international assistance strategy, feminine international assistance policy. As part of the ending rural hunger project, we had a professor based in the UK look at the history of Canada's food and nutrition security strategies. Turns out, one of the great achievements of the Harper government, was to really consolidate its efforts on food nutrition security. But then he looked at the latest strategy, the feminist policy and said, wow it's not really clear what's happening there. What's the continuity and food and nutrition security is central for a feminist policy. So, where's that continuity.

Then we looked, as Homi said, at the domestic. So, this is a universal challenge, of course. This is the advanced economies too. This is data from Carol Graham, who is our colleague here

looking the Gallop Data. This is the survey of food and security in Canada. This is self-described food and security, the same graph that Homi showed before for the world. And this is over the past decade and roughly speaking it's going up, it's certainly not going down. So, we do have a global challenge and this is probably better measured than anything else because it's self-assessed. But even Canada isn't there yet. It's got about 10 percent of the population, about 3.5 million food insecure. That's not okay either. It's a bit doomsday but it's not doomsday, it's just trying to be honest about where we stand.

So, let me share a flip side. This morning on my way here, I got the most inspiring email of the week, for sure. It was Lauren Bush Lauren sending out her ten year anniversary email. Some of you might know, Lauren Bush Lauren started ten years ago today, basically, a feed. It's a social venture that supports school meals, originally with WFP around the world and also now in America, in the U.S. Ten year anniversary they announced today, they've supported 100 million school meals. One person, one company, a team obviously, but said, let's actually use social marketing. It's a fashion company that supports school meals, 100 million. She's holding herself accountable. That she is remodeling accountability to take on rural hunger through very creative needs.

So, I am of the view, as much as this feels a little bit Groundhog Day in having these conversations because I'm just being very frank here. I do think that there are many seeds of breakthrough that could bend the curve towards much faster progress from the private sector and the public sector and the multilateral institutions. But we need to be very honest that we're roughly an order magnitude off right now, if we're going to have a chance at getting there.

MR. KHARAS: Thank you. Well, that was both, I'm not quite sure how that left me feeling but it did make me actually want to come back to Asma. Because at the end of the day, at least part of what you were saying is, we have to change things, we have to make some noise, we have to have better advocacy and this is what you've been doing. And so, how, how are we going to change and have a breakthrough in the advocacy and the accountability. Does it help us to link the global issues with the domestic issues or is that a wedge where people say, no we're got problems at home, let's take care of those first and then we can take care of problems overseas. Where do you stand right now on some of these issues?

MS. LATEEF: To achieve the SDGs, we have to be able to walk and chew gum at the

same time. I think, yes, there is a political moment in politics right now that is saying we can't do both, we have to focus on domestic first. But I think that's a false argument and we have to really push back. Clearly, the benefits of prosperity in developing countries are felt here as well. So, we have to really make that case. A lot of what has been said, is really focused on political will. There is the accountability piece and, of course, it will say to you and others can push for that accountability. But it is political will and for whatever reason, we as a community have not been able to make the case that agriculture and food security and nutrition are foundational investments in health and productivity. I think even in this country, the Farm Bill, is completely separate from the health outcomes of the average American. There is a disconnect. And we haven't made that connection clearly enough. We have to really be able to point to the evidence and make that case that these investments have a very high return on investment. We're not being heard except amongst ourselves and we all really get it.

So, I think we really do need to find ways to talk, I mean, even on nutrition, the evidence is so clear. 16 to 1 return on investment for the lancet interventions. We haven't been able to get the kind of money to scale up those and it's not a lot of money in the grander scheme of things. It's a very small amount of money. So, we have got to somehow find ways of talking about these issues that appeal to finance ministers, that appeal to bankers, that's where the power lies and that's where we need to have an impact.

MR. KHARAS: So Paul, I mean you've been having these replenishment discussions et cetera. You put this kind of evidence presumably on the table. My understanding is you're not getting the kind of response that you might really want. What else can be done, I mean, what do people say when you say we have these opportunities and you're just leaving them on table.

MR. WINTERS: I was going to comment anyway following up on what was just said. I've spoken a lot with donors, especially Europeans, in the last couple of months. I think it's less political will as political reality. The governments of Europe, at least, they want to spend money on anything that's going to stop migration or deal with migration. So, the funding that they and, in fact, organizations like ours and we were told IDA faced the same thing is that, you have to sell yourself as dealing with fragile situations in the hope that you're going to stem migration.

MR. KHARAS: So, is that why FAO just put out something saying all of the hunger thing

is actually going to stop migration?

MR. WINTERS: The emphasis on that part, I think, is largely political. Within Europe, there is an obsession with migration issues and a desire to put funds towards migration within the country or stemming it from where it's coming from. I do think that that's a reality that we have to face. While you make the argument about the long term and I understand the argument about the long term, the donors are telling us in private conversations that this is the reality that they face back at home. If they can't make the arguments for funding, they can only make the argument funding IFAD by making it part of a broader context of concern about migration issues. So, it's really driven. We had two donors, one cut in half their pledges last time and one completely cut from our last replenishment in the middle of the cycle even though they pledged it, entirely to use the money for migration within the country. So, it's driving a lot of what is going on in the discussions.

MR. KHARAS: Well that's not terribly encouraging. Let me open it up a little bit and feel free to both ask questions and if you have any comments, thoughts or advice as to how we can remedy this situation. I think that that would also be welcomed. We'll take a few.

MR. KUNARD: Thank you. I'm John Kunrad with the Hunger Project. I have a question for Dr. Siba. We've talked a lot about the accountability sort of the top down institutional government and that makes sense because we're in Washington. But I'm really interested in the lack of voice of small scale farmers with their own governments. In the ability to bridge that gap so that small scale farmers can actually demand accountability form their own governments. I'm just wondering, in your case studies, you have some strong decentralizers and some weak decentralizers. Did you see any good examples of rural people gaining more demand over resources? I was also just in Uganda. Their district budgets have fallen in recent years rather than gone up but you also looked at where we're at. So, I'm just wondering what you saw in terms of the ability of bottom up pressure coming to bear on this.

SPEAKER: I'd like to ask a devil's advocate kind of question. If there is rural poor, then give them a bus ticket to the local big city, Nairobi, whatever. Women's farming was, at least in Africa, historically women's work. So, Conagra or Monsanto buy up the land although there is not a lot of property ownership in a lot of Africa countries. Why don't you fix it with realistic solutions, bus ticket, let a business buy up the land and plant what they want.

MS. KAVARIA: My name is Marsha Kavaria, I teach at (inaudible) at the Washington University. My question is about global warming, climate change and its effect on global agriculture and also food security. Especially after what we've seen in Puerto Rico that even developing countries, we have a deal when it comes to distribution of food. Thank you.

MR. KHARAS: Why don't we take these questions and then we'll come back for another round. Asma, you want to start?

MS. LATEEF: Yes, I'll take the climate change question because I was thinking that we had failed to mention that so thank you for asking that question. It is already having an impact on agriculture yields. So, the link between hunger and climate change is both direct and then indirect in the sense that it is driving conflict and migration as people move because their land is, they're unable to grow crops where they are. So, that is, I think that compounds the challenge. Not only do we have to support and just getting up to speed with traditional technologies but really integrating the whole idea of adaptation to climate change very much into everything we do and resilience and building resilience. Because as you mentioned, we will never know where the shocks are coming from and so people will never to be able to rebound more quickly.

MR. KHARAS: Paul. Small scale farmers, I thought you were supposed to represent them.

MR. WINTERS: Actually if you don't mind, I wanted to answer about the bus ticket first. To me, it's a fairly failed policy and this is what was found in Latin American by Dijon Green Sajula a while back. When all you're doing is exporting poor people from rural areas to urban areas and that's what a bus ticket does. All you're doing is taking poor people and moving them to urban areas, you haven't solved any problems. And while we expect that a certain percent of people will make to urban areas, that makes perfect sense. There are opportunities in rural areas to get ahead through agriculture, through linked industries, linked agriculture. Part of the work that Lou Christiansen and others have done, is to show not only is agriculture the most poverty reducing sector but the non-agricultural sector is most closely linked to agriculture are the ones that are most poverty reducing. And so, as a sector for poverty reduction, it's quite effective and it would be foolish to not recognize that that's the case. As I said, we expect some sort of balance between areas but we also don't want people to flee agriculture because

they lack opportunities and productivity is down, et cetera. So, it's a missed opportunity just to give them a bus ticket.

In terms of the small holders and accountability, this is something that IFAD tries to work on. It is complicated and a lot depends on the government context, as you said, about decentralization. One area that I think is very important is transparency and that's something that we're just trying to do. We're a bit behind in our organization in being transparent. But if you're very clear about your projects and their objectives and you put your project completion reports and the information out there and you reflect back to the small holders you're supposed to be helping both in your projects and other government projects, then they have a better chance to have a voice and to say this is the right path or not. And so, if we're all a bit more transparent on what we're doing within the field, then it would allow them to actually speak up. But right now, a lot of organizations and governments don't really talk about what their strategies are, don't say what they're doing, don't put the data out there that suggests success or not success and so it makes it harder to have a voice when you have no information to have a voice about it.

MR. KHARAS: John.

MR. MCARTHUR: I would just say that the fastest growing cities in the world are in Africa, in the countries with the lowest agricultural productivity. They're growing faster than the cities in China. They're already buying bus tickets. The problem is, that they're leaving and not because of great opportunity, they're leaving because of lack of opportunity. So, this is not the structural transformation of success. This is closer to the Malthusian theorem, low productivity, rural areas, very small farms, no jobs in the city but we're going to give it a go. So, I actually want them to buy fewer bus tickets in those places because I'd like them to have more opportunity as a concept.

Now, one of the things that's not adequately appreciated and I'm going to speak in generalities because it depends very much on each economy. Roughly speaking, if you're speaking about the long term wellbeing of the economy, improving of productivity in the local staple crops will basically make your exchange rate more competitive, your real exchange rate, which helps make your export sectors more competitive. One of the puzzles over time is why hasn't Africa developed more export sectors, that is probably, in my view, one of the biggest reasons because they haven't had the agricultural productivity breakthrough to enable that. All the countries in Asia that had the manufacturing

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breakthroughs that we're used to talking about had the agricultural breakthrough first. So, the role of women in farming is still one of these areas where there is a lot more statements made than strong evidence but that's starting to get a bit better, I would argue. There has been a lot of papers in the past couple of years just saying, everything we thought about "women farmers" we need to kind of update our thinking on. So, I would just encourage that as a general rule. I think it does get also to this point of who's voice do we listen to which, I think, is the core of what John is getting at which is absolutely right.

In a lot of countries, the poor people are the last ones to be listened to. In some countries like Kenya, it's pretty good at mobilizing right now, especially through mobile connectivity. So, I think that's an unanswered question in a lot of places but a better and better answered question in some places. There is also this whole thing around, oh all the new jobs are being created in the service sector anyhow. Again, sometimes that's because of success like Luke Christian's done, sometimes it's because nothing is working so that's all they can do. So, we always need to be unpacking, why are these trends taking shape the way they are.

MR. KHARAS: Small farmers directly at you.

MS. SIBA: I think you pointed out, which I think is the most challenging task for governments of these African countries. Ethiopia, for example, is one of the countries following this system, one of which there are resources being fragmented into three --

SPEAKER: Could you speak up? We can't hear you.

MS. SIBA: So, resource fragmentation. Some of these countries are having a (inaudible) system. So, it's spread out from the region, the national labor to regions and lower level. So, when it gets to the lower level of administrative levels, really it becomes almost impossible to address food and nutrition security when the resources are (inaudible) various administrative units we have.

So, just to give you an example, on any job that I interviewed working on food security in Ethiopia, I asked what could be improved, what is the major challenge that you are facing as an international (inaudible) Ethiopia. So, the major challenge, there was lack of ownership. Even the projects in the area we have (inaudible) by the (inaudible), will not be -- so they get to be asked, (inaudible) those projects in the future. It's because of the lack of ownership of these projects after the completion of the (inaudible) tasks.

So, we also raised this question to world stakeholders. What could be improved, for example, on the government side? They would say joint planning, joint accountability, so it's not blaming one ministry for something when things go wrong. If things are planned jointly than they will be jointly accountable for the success or the failure or those projects which we found interesting. So, how are they addressing this issue of the lack of ownership of these projects? Some of the m train the locals, the youth of the locals so they have better ownership of these projects and so they don't get asked to rehabilitate these projects or these areas that they worked on previously. Multilaterals for especially the ABD, have some roles to play in influencing the resource distribution across the various affected areas. So, if the distribution of resources agreed upon in advance, if they have a say on the way resources are distributed according to the needs of these countries, I think we will be better at achieving the various disparities across different societies, different regions in some of the countries.

Finally, on accountability, these indicators from my own experience, they get the best attention of policy makers when we put them in comparative perspective. How is (inaudible) compared to the other countries? This is the most attention you get from a policy maker when you put it in a comparative perspective. I think they play a role in them and at least making them more aware of (inaudible) standing of their respective countries.

MR. KHARAS: Thank you. I can't resist just saying, there was an actual randomized control trial of bus tickets in Bangladesh. It proved to be a very successful development intervention. The problem, of course, is that 3.5 billion people in rural areas means an awful lot of bus tickets, so it's unclear that it can really go to scale. And the other part, I think, which is interesting about the way the question was posed is that it tells us that the real issue with food and nutrition security is not actually about how much food is being produced, let one produce on that land, it's about the access to the individuals to the food and the affordability. So, I think we need to constantly come back to remind ourselves that this is a person, it's about people, not about aggregate production. Although, obviously, for small farm producers, productivity is their principle source of income levels.

SPEAKER: Thank you so much for the panel. I've learned a lot this morning. I'm formerly the associate administrator of the Office of International Cooperation and Development at the U.S. Department of Agriculture. That office has now been part of the foreign agricultural service. A lot of

this discussion seems awfully familiar going back decades. This could be 1987 for all intense and purposes but it shows a lot of progress also. So, my question is, our office did a lot of technical assistance, I didn't hear the word technical assistance, training of foreign agriculturalists. I remember a project in Cameroon on roots and tubers between the University of Maryland, Eastern Shore, historically black college and an institution in Cameroon, that was wildly successful in terms of increasing yields, et cetera. So, I was wondering if maybe one or more of the panelists could discuss, what is the role of technical assistance, has it fallen out of favor, what about training of foreign agriculturalists. Does this make a difference and I'm just here to listen and learn, thank you.

MS. YOON: I'm No Yoon, Foundation for Empowerment. Thank you very much for awe inspiring and very tiresome discussions, I agree. I feel here, in some sense, very encouraging that the international community shows such an intense interest in rural hunger. On the other hand, I feel that we all hear about the political view or whatever from the international perspective. How about the political view of the country and their leaders while they are own in their own country not only coming to the international organization as the head of those (inaudible). So, my question here is that basically from my experience in Africa and other places as a World Bank economist, I have seen very little political work of the government with a rural area anyway but that's not only developing countries in the world. So, how do you promote the political view of each and every country, that's my first question?

My second question is that, while you talk a lot about the agriculture productivity and the holistic approach of the rural development, I feel that, I think here (inaudible) issues such as land title issues and one problem with the small holding our land already in 1990s. They small holding agriculture land was a problem. One of the most important elements for low agriculture productivity so I don't hear that kind of -- plus actually agriculture business you talked about East Asia such as China and in Korea, high agriculture productivity. High agriculture productivity was (inaudible) business. For example, food processing or whatever in relation to the food agriculture product that they have produced. So, as a person who has served one and a half generation of the people who took a train ticket, not a bus ticket, that's how I went to (inaudible) and how I -- so that's my second question.

Third, my last question is, if IFAD, we are talking about IFAD and world hunger and asking whether North Korea which has a big problem in rural hunger, is part of the program or not. Thank

you very much.

MR. KHARAS: Thank you. What is we take those questions and if you have any final thoughts that you want to leave our audience with just tack them onto the end of your answers to the questions. Let's just go straight down the row.

MS. LATEEF: I'll tackle the political will in developing countries. I think there is growing political will. There is a disconnect between spending, budget allocation. But if you look at the SDG agenda, I think it was developing countries that really pushed for SDG too, the hunger goal and that's a pretty comprehensive goal. The scaling up nutrition movement now has 60 countries that have signed up. Very little money yet to accompany that commitment from donors or countries but there is a growing recognition that nutrition is really important to long term economic outcomes. So, I think we have to move to that next level of producing the resources that are needed both domestic and ODA and multilateral but we also need to really be engaging policy makers on being smart with those resources and not missing opportunities.

The other issue that we didn't really touch on is the issue of social protection and how do you build social protection systems even in rural areas so that you can both support agriculture but also meet immediate needs to improve health and nutrition outcomes. That, I think, is a policy conversation. It's a conversation about taking a very comprehensive approach and that's going to require a lot of resources.

MR. KHARAS: Paul.

MR. WINTERS: On the North Korea question, that's an easy one. Yes, we actually do have a program there. It's suspended right now mostly because they're the only country that has not paid us back for previous support so it's in arrears presently but we do have a program there.

On the technical assistance question, to me it's, I think the question should be thought of in a different way. There's not an IFAD project across the board that does not have a technical assistance component. But to me, the instant question is what kind of technical assistance and where it should be targeted. The big questions I staples versus other crops. IFAD, in general, has moved away from staples. This is one of the questions that I don't think we have the answer to but is, what is the best pathway out of poverty. Remember, we target, so we're not talking about broad expansion and

agriculture productivity within a country. We're talking about, what is going to transform the lives of this group of rural households and get them out of poverty. Should it be promoting roots and tubers or should it be promoting dairy production which has a higher value in the market. Our answer has generally been the latter and we've shifted very much towards products that can be marketable. And that can be roots and tubers. You can sell potatoes to Frito Lay. There is a project in Ecuador that does that but it generally is other crops besides that. This is part of a debate that's going on. There is a paper written by Prabhu Pingali who is Cornell University, used to be at Gates and FAO. That basically says that the consultants group for national ag research, all those research centers out there, their fundamental problem is they're too fixated on staples and they need to move into other crops. And for nutrition and for general transformation out of poverty, this is the way to go.

So, to me the technical assistance question, I mean, yes of course, that's productivity change. It's where should we focus that technical assistance both to broadly include agricultural production, productivity which is one question but also the targeted programs. So, I think that's the big question we have to answer.

MR. MCARTHUR: I'll just say, I think the political will I agree with but don't agree with. Because the thing about political will, I like political leadership as much as anyone. When one calls for political will, it's hard to know when it's there versus not. When I've seen political leaders deliver, it's because someone has put a specific thing in front of them, what I call the yes proposition that they have to say yes to. So, the question is, what is the practical set of things that we need to put in front of people and build a coalition that they have to say yes to.

I would argue, even on the nutrition side, I've talked with a lot of the people leading on the global nutrition efforts. They've said, we have these great lancet studies, we have these great movements, great political recognition but what are the top three things that need to get done for nutrition. What's the thing that you can tell a finance minister, fund X. Make sure these three things are in every line item of your budget. I don't think we have enough clarity on that yet. That's part of where we need to get. I think where Feed the Future did a really good actually is they translated into, these are the line items, these are the things and this is what you're going to back. And then the politicians usually aren't doing the research themselves they're reading the memo from the activist.

This gets to the final point on the role of science. So, I've spent a lot of time in the global health debates over many years and one of the things that is under appreciated is the role of the scientific community, especially the applied research community with the debates taking place literally week in and week out, now day in and day out in digital publishing and the lancet and the BMJ. This is where much of the policy debate happens is with the academics and the academic practitioners saying, here's how to get a two-thirds reduction in child mortality. No, no, no, here's how to get a two-thirds reduction in child mortality. No, no, no, here's what really needs to be done.

In most disciplines of global policy making, we don't have that level of what I would call, applied research rigor. And so, with the CG system that's in a lot of the basic science, what's the venue, maybe it's food policy, maybe it's science, maybe it's nature, maybe it's a new journal, an e-journal that Homi and I just contributed with Wakame von Brown to this new kind of e economics journal focused on policy outcomes. But there needs to be a venue for all those scientists to be, I would argue, prompted to focus, what's the ROY on that scientific breakthrough. What's the scalable proposition on that breakthrough, what's the budget requirement of not just doing that for a project or a landscape, which is how a lot of the agronomists are trained to think, but for a country or a district within the country or a province or a state or what have you. So, I would really just urge everyone to look for and promote that kind of applied research because those debates are what underpin the policy makers and the politicians to deliver political will around things that work.

MS. SIBA: I agree on two points with John. One is on the political will so let me start with that. I think at least to the extent that it applies to the countries we looked at, there seems to be an interest in promoting agriculture and food security in general. I don't think the issue is not this awareness from policy makers that we need to do something on agriculture, food security. But there's a lot of action going on in terms of designing strategy for nutrition policy. Agriculture, productive safety nets, social safety nets, there are lots of action going on (skipped audio) countries we closely looked at.

The problem is maybe we're not too focused, we are dealing with juggling with many things given the resource constraints. So, one of the major challenges these governments face is that how to balance security aspect, how to address food security for the most vulnerable, at the same time, promote productivity, so they are juggling it. Given the resource constraint, I think, the issue should be how to

focus and how to maintain the balance between equity and promoting economic growth in the agriculture sector. So, I would say there is an awareness in the political will. When the resources are there, it varies between different countries in terms of the resources are one major role maybe political will that we have looked at in this country.

You mentioned also issues of land titling. So, most of the countries we looked at, they seemed to have a relatively good policy on access to productive inputs for agriculture on paper. The challenge is how to implement them on the ground. So, land is a classic example. It's a political issue, the type of land rights these countries have is sometimes not to be touched. So, intermediate solution is land titling. For example, Ethiopia implemented a land certification program. There are a number of studies showing that it improved agricultural productivity somehow and also farm implement. But it's a major challenge, access to land is one of the major challenges these countries face, though on paper most governments (inaudible) the importance to access to land.

MR. KHARAS: Thank you. Well, I wanted to just leave you with the following thought. We're dealing with these global challenges, the question is, what does a place like the Brookings Institution have to do about all of this. So, I would say, when we started with this project, it was surprising to me to see how fragmented the information was that would allow one to have a reasonable conversation about these policies. Some of it is in FAO, some of it is in IFAD, some of it in the World Bank, some of it is with the donors. Just putting together, the aggregate numbers so that you can start to have a conversation about where the needs and the results, what other policies look like and what governments are doing for themselves, what are the resources that are going into these investments. That basic framing doesn't really exist. It doesn't exist for global hunger and it doesn't exist for many of the other SDGs as well with the possible exception of health where there has been this real explosion.

So, one of the things that we've been trying to do is to really encourage people to pay attention to the numbers. The data are not of high quality and improving that, not just demanding more data but improving the quality of the data, is really fundamental. FAO has just revised their estimates of cereal yields of Cote d'Ivoire form something upwards of three and a bit tons per hectare to two and a bit tons per hectare. That's a one-third change. We can't navigate in this world, if we are simply ignorant with that order of magnitude of some really fundamental data.

So, I hope that by putting numbers together, by identifying the data gaps, by looking at the quality, and to be honest, by making some noise, we can keep drawing attention to this problem. Because it does seem to me, all of us need to do what we can to make some noise on this issue, otherwise we'll be sitting here in another five years' time, John will have far fewer hairs on his head and we'll be repeating the same thing. So, thank you very much, join me in thanking our panelists.

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