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Q&A: morning session

Panel: Rachel Kyte, Luke Chandler, Dr Shenggen Fan, Dr Willie Dar,
Dr Laurent Zessler, Yudi Guntara Noor
Facilitator: Dr Jim Woodhill
Principal Sector Specialist, Food Security & Rural Development, DFAT

Paper prepared for presentation at the "Ethics, Efficiency and Food Security" The Crawford Fund 2014 Annual Parliamentary Conference, Parliament House Canberra ACT, Australia 26-28 August 2014

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Facilitator (Jim Woodlhill): Our morning speakers have given an extremely insightful and challenging set of presentations, highlighting the diversity of issues and the complexity of those issues that need to be considered in tackling food and nutrition security. Looking across all the presentations so far, some radical changes are going to have to happen if, using Rachel Kyte's words, we are going to fix a broken food system. These changes are going to have to happen very quickly, at a large scale.

How do we get the political and business leadership to drive that sort of change?

A. (Rachel Kyte): I think a number of countries are already in the middle of decisions that need to be taken now, that will not lock them into the wrong pathway going forward. I was in Vietnam in recent days, where huge decisions about the management of the Mekong Delta need to be made, in terms of future livelihoods, the future stability of that part of the country, and the economic viability of food production systems which are important to the economy. Some of the units of account for decision-making are local, regional and national and then, of course, there is a unit of account for all of the countries of the Mekong. The question is whether the international community can keep a focus on the long-term objectives, and I think it is also important for the international community to be able to break down the 'silos'. There is extraordinary work going on in agriculture; there is extraordinary work going on in nutrition; there is extraordinary work going on in livelihood development and economic development. Are we, as the international community, reinforcing the silos that exist at a national level or are we able to help them to be broken down? Also, we should listen to 'the client': in our case, the need for revolutionary changes in the way that agriculture delivers stability. The voices are coming from African heads of state, from South Asian and Asian heads of state. The developed world has a duty of care to listen to what people are asking for.

A. (Luke Chandler): From an Australian agricultural point of view, I think it is very important that government gets involved in facilitating new trade flows and new partnerships between Australia and our Asian neighbours as we shift our exports more into that part of the world. The supply chains are critical, as was discussed earlier. We need strong government-to-government relationships there, and strong business-to-business relationships. Many of those are still in

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the development stage, and there have been examples where those relationships have broken down, trade flows have suffered, industries have suffered, and profitability and even livelihoods suffer. The current government has taken some great steps in terms of market access over recent months. This time last year we had no free trade agreements in place with any of the six nations that are Australia's six major agricultural trade destinations — which represent around 60% of our exports. Now we have two and we are working on a trade agreement with China as well. The more we can do to break down those barriers and facilitate trade into our Asian neighbours the better.

A. (Shenggen Fan): Two points. First, we need evidence; facts on what has worked, what has not worked. Second, we need to communicate to general citizens, so the general citizens will push the political process to make the right decisions and the right commitments. Some countries have become more democratic than before, responding to citizens' demands. How can we communicate? What can we discuss with our citizens, everybody, political constituents, to push that political process?

Facilitator (Jim Woodhill): Your message is that we need to be preaching beyond the converted in this room.

A. (Willie Dar): Related to biofuels development, our experience is that you need governments' interventions in terms of the right policy environment, the right taxes that have to be paid so that you can promote biofuels development strongly, and you need also to harmonise existing policies that are contradictory to each other. We cannot succeed in a big way without policy support initiated and institutionalised in governments, and incentives that can be offered to those engaged in biofuels development.

Facilitator (Jim Woodhill): You are saying that harmonisation of policy across different governments is a really critical issue. Now to questions from the floor.

Q. (Jenny Goldie, National President of Sustainable Population Australia): My question is directed to Rachel Kyte who is admirable for her recognition of the way in which climate change is going to affect agriculture. I am concerned that there does not seem to be a sense of urgency about the problems of population growth. Everyone mentions it, but clearly it is going to be better if we have fewer people rather than more people in 2050 and 2100. Is the World Bank looking at development projects, population health environment projects – PHE – which combine family planning with development projects of coastal management, and that sort of thing?

A. (Rachel Kyte): It was at the Cairo conference 20 years ago that there was one of those very rare paradigm shifts in world understanding: that it is the status of women – not just that a woman graduates from her elementary school or primary school education, but that for every year of secondary education you start to get economic benefits. That empowerment, those economic benefits, that voice, these lead to lower fertility levels. On its own that will not help ... will not solve everything. Violence against women, which of course is a huge issue in the Pacific. affects the outcome from all of that investment. Yes, we

are fully involved in that economic development that results in women being able to make choices about what happens to their own bodies, and that results, with everything else, in reduced fertility levels. In 20 years the world has made huge progress. The problem is that there are a few places in the world where the population rates and the fertility rates are still extraordinarily high. The momentum that is building up there, together with the greying of the global population and the very young populations in urban settings, is going to create pockets of potential instability if not managed very well.

Is the solution fewer people? I think the solution, in some places, is to really bring fertility levels down and that is done through investing in women and economic development and the things that we all know that work. The solution is also to look at how the people on the planet actually live. One of the big issues for the development goals that are being negotiated currently is this concept of universality. When we negotiated the last development goals, the last goal, Goal 8, was for all of us that live in the developed world – and that is the goal where we really fell down. We were supposed to act in solidarity with those who had to achieve Goals I–7. This time when negotiating development goals we are trying to negotiate universal goals. It is not enough for a developed country to say, 'OK, you over there in the developing world, fix your agriculture systems, etc., etc.'. It is how are we living, how are we eating, how are we wasting, and the footprint of everybody we put onto the planet. This concept of universality has to be embraced.

We have seen fertility levels come down. We have seen progress in some places. In other places it has not gone quite fast enough. Do I think there's enough gender-focused development going on? Do I think that we have solved the issue of the empowerment of women, 20 years after Cairo? Not at all. We have a lot to do and it is an intractable problem, but we can see what has worked in some places in the world.

A. (Laurent Zessler): I would like to re-emphasise those points. For many years after the Cairo conference we were looking at how to reduce fertility. We have made progress in some countries and failed in other countries. Before my posting in the Pacific I was posted in Afghanistan where on average a woman has six children. What has progressed, and what has been a key factor for us, is when we talk about rights: women's access to contraceptives is a right. It is as much a right as is proper education, proper healthcare and so on. It is a right. When we empower women and make them understand that this is their right and they have this right to control when they want to be pregnant and what type of family they want to have, then we have some success. We need to continue to invest in these matters; into access to family planning. I would like to re-emphasise that the population will decrease and stabilise if we have this right fulfilled in many countries, and many governments addressing it. I think that Australia, as an important international player, has a very important role to play as an advocate on these issues by intervening on the global scene and also at country level on these aspects. I think countries are receptive, but we would like some countries to react more strongly and invest more in their own family planning methods and their own infrastructure related to that.

Q. (Shashi Sharma, from Murdoch University): My question is to Rachel Kyte. You mentioned the billion dollar investment in CGIAR research for food. In a report I read recently, 90% of international investment in research goes into producing more food, whereas there is significant merit in investing in not losing what we grow and produce. Is the CGIAR looking at investing in those areas? A related question is about globalisation and its importance for production. With globalisation there are many benefits, but at the same time we are disseminating pests and diseases across the world, and the majority of the developing countries do not have very biosecure systems to safeguard their production regions and their food value chains. Are there going to be risks to the investment, with this situation?

A. (Rachel Kyte): I will answer very briefly because there are two Director Generals of CG Centres on this panel with me. The CGIAR has been increasingly moving to fund research programs that cut across the traditional crop-by-crop research: research on nutrition, research on climate change, for example. They are taking the deep understanding of the dimensions of different crops and trying to bring that together, focusing on landscape approaches, for example. I think there needs to be much more progress, but I think we have shifted direction in the last few years. On your second point, following disease outbreaks a few years ago there was an injection of funds into zoonotic diseases and the relationships between public health and the agricultural sector, including at the global coordination level. I still remain quite concerned that that is a weak point, and that for many countries, even though there was investment in their bio-safety protocols and the way in which they dealt with this issue at the national level, I think we are vulnerable, as a global community, to continued outbreaks of zoonotic diseases. It is of concern to us, both from a health perspective and also from an agricultural perspective.

A. (Willie Dar): One billion dollars – is that enough? It is not enough. We need more. There are big issues before us, global contemporary issues: climate change, nutrition, land degradation, desertification, loss of biodiversity, As Rachel said, the CGIAR research programs today are strengthening the synergies between and among the 15 Centres. I believe that is very significant progress, although we can further improve this relationship and work together more.

A. (Shenggen Fan): I want to bring in the IFPRI perspective here. We have about US\$158 million investment in policy and nutrition research. A very small share of that amount is related to technology to expand production. We have really changed the priorities to also include nutrition and food safety. IFPRI has the largest concentration of nutritionists of all the CGIAR Centres; probably a sizable number compared to any university. We have about 25 to 30 nutritionists and also a couple of health specialists. We pay serious attention to nutrition. From my rough calculation, probably 25–30% of our spending is related to nutrition and food safety. We are leading one of the largest CGIAR research programs called 'Agriculture for Nutrition and Health': this is big shift. Another program is about poverty issues, to make sure that poor people will have access to food through their income, through markets, with globalisation, and how globalisation affects everybody in the world. I think there is no doubt

we have benefited from globalisation, but there are some challenges: for example, cross-boundary diseases, and bio-terrorism. All this will affect our global food system, and that is the area we need to work on. So we treat the global food system as one integrated system. We look at where it is weakest and lowest, and we aim to address these low and weak points, because I am afraid if we do not address these then something may happen which will really lead to the collapse of the global food system, and trade will not work. The Ebola in Sierra Leone, in Guinea, is shutting down the regional movements of people, which means that food cannot move around. If that situation is not solved we will see malnourishment problems in these regions probably in the next two or three months.

Q. (Risti Permani, Research Fellow and Lecturer in Global Food Studies at the University of Adelaide): Dr Shenggen Fan mentioned governance. Global governance in particular is a topic that we have not discussed much. We know the issues, we might have the solutions, we have the science and the facts, but how do we deliver those? I think that is one of the biggest challenges. When we talk about poverty, we have Millennium Development Goals (MDGs) ensuring that all countries have the same goals which we monitor over time and then we evaluate. But when we talk about food security... when I attended a regional dialogue last year that was parallel to the APEC1 meetings in Indonesia, we invited countries in the Asia-Pacific to submit a country report about how they actually defined food security. All of them use a self-sufficiency ratio as the indicator. We all agree food security is not only about availability but is also about access and nutrition and equality. But when we talk to governments, it is always self-sufficiency that concerns them. Therefore my question, to the people in this conference who have decision-making potential, is: Do we actually have a plan? Is there any progress in terms of redefining this global governance of food security? Is it part of the post-2015 agenda, because 2015 is only a few months away? Is it going to be discussed soon? I am a bit worried.

A. (Shenggen Fan): I can offer some of my perspectives. I think the current global governance system related to food and agriculture was set up in, probably, the late '40s or early '50s, but now the world has changed. The private sector, the charity organisations and the emerging economies, G20 countries, all these account for the largest shares of global food production, global food consumption. We need to hear the voices of the emerging economies - India, China, Brazil – and the private sector, on the global governance structure. That is critical. I think the G20 can play a very important role with Australia leading the G20 this year. All G20 countries account for probably 80% or even more of the world's food consumption and production. How can we use G20 as a mechanism to ensure that the member countries work together; for example, in terms of trade issues, food export, prices, sharing information on stocks, on production, prices, investment in R&D? Look at the investment picture. It is the emerging economies who have increased their R&D investment substantially, and with a new world order coming we need to be more open, more inclusive to this. Global governance is on the post-2015 agenda. I am worried that the

¹ Asia-Pacific Economic Co-operation

current process has been dominated by the UN agencies. Particularly, we need food and nutrition goals. I really hope that emerging countries can drive, lead and own the post-2015 agenda. Unless they own, drive, lead the agenda, we will not achieve an end to hunger and malnutrition by 2025 or 2030.

A. (Yudi Guntara Noor): I think when the world becomes global, there is no war between countries. I agree that probably at the moment it is government that is the dominant sector. I think the private sector will begin playing more important roles and then governments will have to facilitate and put policies in place, so that in the end the food can flow from the producer to the consumer. I think other countries may look at Indonesia as an example after the food crisis in 2008. Much of our agenda then was about self-sufficiency, but also this can lead to protectionism. For the future I think the most important thing is to facilitate how the producer can send food to the consumer.

A. (Laurent Zessler): Global governance is currently being defined by many world leaders and experts as we near post-2015. We [UNFPA] have noticed that most governments know why they succeeded on some MDGs and why they failed on others. They have made their report. They know what parts of the structure are wrong. Basically what emerges is that if countries cannot rely on their own governments, then many countries will have to rely on the private sector, on the NGO community, because they are the counter power that can bring about change. We see also that there is more and more emphasis on greater accountability and also greater accountability for foreign aid, which is now being reviewed and carefully monitored. Being optimistic, I think there is much more awareness about how issues such as food security, population growth and even security should be addressed. But we still have challenges. We hope for the participation of young persons, youth. We are now trying to define goals related to youth participation and youth involvement because this is where they have the power to say something and to be involved in the decision-making process.

A. (Willie Dar): [At ICRISAT] we anchor our research for development activities on overarching development goals. I believe you in your observation that most Ministers of Agriculture in developing countries would only equate food security to self-sufficiency. In our research for development there are five overarching goals, development goals. One is food sufficiency; the second is economic income security; the third is nutrition security; the fourth is environment sustainability and resilience; and the fifth is women and youth empowerment. Those are the five development goals that we research.

A. (Luke Chandler): A quick comment, in the context of the G20 which was mentioned. Rabobank is holding a conference in the week leading up to the G20, called the F20 Summit (F for food), for around 500 of our farmer clients from around the world. We shall get some of these issues on the table for the G20, and particularly look at issues challenging farmers around the world, such as succession and sustainability and similar issues.

Q. (Tara Mackenzie, a Crawford Fund scholar from University of the Sunshine Coast): I have a question for Luke Chandler. Talking about the Australian farmers becoming increasingly disempowered, what do you consider are the key factors in building farmer profitability and resilience?

A. (Luke Chandler): The biggest challenge that farmers in Australia have at the moment, if you look over the last five or ten years, is that increasingly we have become less competitive in terms of our costs of production. Australia is one of the largest wheat exporters in the world. We are now the most expensive producer of wheat of any of those major exporters onto the world market. We do produce a higher quality of wheat, but the only way that we can be really competitive into markets such as Indonesia where 25% of our exports go now is because we have a significant freight advantage over other exporters such as Ukraine or Russia or Canada or the United States. In beef the situation is similar. It costs almost four times as much to process a beast in Australia as it does in Brazil. and about twice as much as it does in the United States, so our costs are really prohibitive. Our labour costs are significantly more expensive than for other producers in the world. Electricity costs have been skyrocketing. So the biggest issue in terms of profitability is that the cost base has just been rising far more than the commodity price and, as I highlighted in my paper, terms of trade for farmers have been declining. It is a real challenge for farmers to decide how to invest, how to facilitate succession. Debt levels have been rising in Australian agriculture. To boost incomes, we need to be trying to find higher value markets where we can effectively lift the top line.

Facilitator (Jim Woodhill): The main way forward is higher value markets?

A. (Luke Chandler): Well, we cannot compete at the lower end of the commodity spectrum. Take wheat, for example. In places like Ukraine and Russia, even with the fighting they have there at the moment, there has not been any sort of indication that exports have slowed at all, and they can produce wheat a lot more cheaply than we can. In traditional markets for Australia, which were the Middle East, North Africa and Europe, we cannot compete any more. Our exports have shifted more towards Asia. Effectively we need to be looking at markets where we can compete and that means leveraging all of the attributes that are special to Australian agriculture – and New Zealand is in a very similar boat – using those 'clean and green' images and trying to extract premiums for the products that we are trying to sell on the world market.

Q. (Justin Borevitz, from the Australian National University): We have heard a lot about the production side, and also that we need to balance the poverty and health issues. But we have not talked about urban agriculture. Maybe from an Australian point of view the population is a little low, but for much of the world where the labour pool is available what does the panel collectively think about the contribution of urban agriculture in the next several decades?

A. (Rachel Kyte): We understand that this is going to become an ever bigger part of the puzzle. Estimates are 10% of all agricultural productivity. So it is something that we have started to look at. I think that we might be in the situation that applied in many other development agencies in the past. That is, that the agricultural work was very rural-focused, and people working on urbanisation practices and the urban planners were in a completely different part of the building. One of the tasks on the 'to do' list at the moment is to gain much better understanding of the dynamic between pathways of urbanisation,

the already very exciting moves towards urban agriculture which are happening in Latin America, North America, Europe and elsewhere, and how to support that as a viable part of the whole food system and also as a viable part of urban livelihoods. Where I think you will see a lot of information coming from us in the next few years is in redefinition of the relationship between rural productive landscapes and cities, and where those lines fall, because that is a vastly changing – and fast changing – point of landscape development.

A. (Luke Chandler): In terms of how urban agriculture might affect Australia, I think, interestingly, we are seeing that trend move the other way. I do not see urban agriculture playing a major role here. In fact we are seeing pressures on intensive protein sectors, say poultry and pork, where the shift is away from intensive agriculture and more towards free range. Consumer demands are playing a large part. Australia has a whole fad around superfoods and these kinds of things, and pasture-fed proteins is a part of that. It is one of the attributes of Australian agriculture. So I think urban agriculture is probably not going to have as big an impact here as it might in other parts of the world where population is much more heavily concentrated.

Q. (Jessica Bogard, a Crawford Fund Scholar from the University of Queensland and WorldFish, one of the CG Centres): The importance of nutrition as a driver and as an output of agricultural systems is clearly gaining a lot of traction at a higher level. But my experience on the ground, or more at a grass-roots level, is that it is really hard to break through the culture of productivity and income generation as the sole way to alleviate poverty and food insecurity. What can we do at that 'program rollout' level to emphasise the importance of nutrition, to get some truly collaborative nutrition and agricultural programs?

A. (Shenggen Fan): There are some successes in using the home garden or homestead food production, promoted by Helen Keller International. That program was implemented in Bangladesh, and now in West Africa. The home garden idea is to work with the women, particularly housewives, to create a garden to produce vegetables and fruit and to educate women about the nutritional values of different vegetables. As a result of that program, something like 3.5 million poor people, hungry people, have been helped through vegetable gardens, and the majority of them are women. Children are better fed, and the women also control more income and more employment. The question is how can we expand these sorts of initiatives – not just producing more rice, rice self-sufficiency? As I said, can we make the Ministers of Agriculture accountable for nutrition outcomes instead of rice self-sufficiency?

Facilitator (*Jim Woodhill*): Your main solution there, Shenggen, is to make ministers accountable for nutrition targets?

A. (Shenggen Fan): Let's do that!

A. (Willie Dar): Let me add to this. For 40 or 50 years, the policy has been to support the big cereals, and I have no problem with that. Now we need to correct that policy distortion and bring in a higher level of support for a balanced-diet framework. It is as simple as that. I would like to make it clear

that we need rice, yes, and we need wheat, we need corn. However, we also need sources of protein, vitamins, minerals, essential oils, so we need fruit and vegetables, legumes: everything is needed. We need to correct that policy distortion. Second, in relation to policies, what are governments supporting in terms of minimum support prices? Again, the big cereals: rice, wheat and corn. There is no minimum support price for the other foodstuffs that we want to promote, such as grain legumes, so again it is a policy issue that has to be corrected.

A. (Rachel Kyte): Yes, I think that the fastest progress is where there is leadership at the country level. That comes either from a Minister of Agriculture who understands what the outcome indicators need to be, or it comes from interaction between a Minister of Health and a Minister of Agriculture which really works. Look at Nigeria or Rwanda or Tanzania. This year there has been a big focus on Africa because the Africans themselves - because 2014 is the 'International Year of Family Farming' - have tried very hard to get themselves organised so that they can say to the rest of the world 'This is what we need', rather than being on the receiving end of lots of policy ideas not all of which are well coordinated. You can see a Rwandan Minister of Agriculture saying 'OK, this is the support I need and these are the landscapes in which we are going to work'. And then you start to see the nutrition levels improve in the villages in that landscape because they are aiming for a balanced outcome, not just for a productivity outcome. The point is, as my colleagues have said, how do you move from this example and that example and my ability to quote eight anecdotes, to something which is systematically being rolled out? That is where these development goals become important, because they will certainly direct where the United Nations puts its money, and where organisations like ours and other regional development banks will put their money. It depends on what you are measuring. If, let us say, stunting is going to become one of the indicators that everybody will use under the new development goals, then that is a proxy for nutrition and for micronutrient nutrition as Shenggen Fan was saying in his paper. It is a proxy for sanitation because even if you are putting nutritious food inside the baby for the first 24 months, if their body is fighting disease for 24 months it is not going to grow. You manage what you measure and you succeed in what you are managing and measuring. Let us hope that the Member State-driven process which starts in a few weeks' time will allow us to come out with goals that will get us the outcomes we really want.

Q. (Dan Etherington, from the private sector, working particularly on coconuts): When we are talking about nutritious products, coconut is probably one of the most nutritious elements and it has a lot to do with the South Pacific. But my question is very small, not big like a coconut. Nobody has mentioned the potential of insects – not as enemies but as food; and not necessarily 'yuk' or 'I can't eat insects', but as a by-product of other foods. We can breed insects that can feed on food that we do not understand or want. For example, from the residue from producing virgin coconut oil in the villages, we have the meal. The meal is a very good source of food for pigs, for chickens and so on, but also for insects, and those insects can feed the chickens. We get the eggs that Dr Dar has asked

for and we get the nutrition. Why no mention of insects?

A. (Rachel Kyte): I like them deep fried with chocolate and chilli myself.

A. (Laurent Zessler): Lots of French people eat snails, imported from Australia.

A. (Willie Dar): I also eat insects, and also from the literature this is one of the potential sources of food in the future.

A. (Yudi Guntara Noor): Insects are most productive for producing animal protein, so that is the challenge for the future.

Q. (Peter Corish, a fibre and grain producer from southern Queensland): We heard Luke's comments earlier, which I fully agreed with, that cost of production is the major issue that Australian farmers face, and that our friends in New Zealand face the same issue; and my exposure to farmers all round the world tells me those farmers are facing this same issue. My question is to Rachel. Climate smart agriculture, I think, is a noble initiative and something that we do really have to focus on, but can it be done in an economically sustainable way?

A. (Rachel Kyte): We think yes, but we are going to have to move our agricultural systems into a place where they are producing the nutritious food that we need, and they are resilient to the changes in the climate which we have already baked into the system, and they are reducing the emissions that come from the technologies we use, from the methods of farming that we use, etc. We should not be pointing our fingers at the agricultural community and saying 'You are part of the problem'. But if the energy sector of the economy is locked into an appropriately difficult and controversial debate about how to reduce their emissions, and if the transport community around the world is locked into a suitably difficult and at times controversial debate about how we are going to move people around with lower emissions, then the agricultural community had better get enjoined in this conversation in a serious way as well. Because if we make huge progress in energy and huge progress in the way we live in cities and huge progress in transport, but the way we manage the landscape still contributes 30% or 40% and therefore a greater percentage of the emissions problem, we will not have solved the problem. Do I think we can do it? Yes. That means that when the European Union (EU) sets its targets for emissions in the next few weeks, part of that has to be an understanding of what EU agriculture's contributions to those emissions will be, and then how the agricultural footprint of the EU is going to be managed along with the renewable energy targets of the EU, etc. I think it is time for us to have that debate. It is time for us to look at what the technological choices are, at scale, over large pieces of land. Choices already exist. If Brazil can reduce emissions by double digit percentages while it has increased its productivity over the last few years, we know it can be done at scale. That is a conversation that has to be had. There is a debate going on here in Australia around the agricultural part of your own carbon dialogue. That conversation is going on in other countries as well. We are going to have to find solutions for farming and forests within one landscape because otherwise we will be leaving out one big part of the problem as well as a very big part of the solution.

Facilitator (Jim Woodhill): A very quick last comment, please, Shenggen.

A. (Shenggen Fan): I think part of the reason why Australia's agricultural competiveness has come down is because of appreciation of your currency, which means your cost of production has increased by 40 or 50% or even more in the last 10 years. What can you do about it? You might remember 'Dutch Disease' which occurred because the discovery of oil in the North Sea drove the wages in the Netherlands very high. That really reduced the competitiveness of many industries in the Netherlands. But they got rid of the Dutch Disease by investing in science and technology to shift their industry to higher value, particularly agricultural industry. Perhaps we should rename it 'Australian Disease' in the future if you don't invest in R&D.

Facilitator (Jim Woodhill): That is another call for really investing in value-added products at the high end of the market.

A. (Shenggen Fan): Sure.



The Crawford Fund sponsored 26 agricultural science students to attend this 2014 annual conference as its Crawford Fund Scholars. They are photographed here with the Fund's state & territory Coordinators and the members of the Crawford Fund Board.