## GENERAL DISCUSSION

**Akio Takenaka:** Okay, so I'd like to move to the general discussion of this session and do you have any additional question or the comments on the former two presentations? Okay, so you have any question or comments on this morning's session?

**Ganesan Balachander:** This is a question for Christian. The L'Aquila Declaration of an additional 20 billion for agricultural research. Now, to what extent have you seen this in Europe. I mean, I've not paid particular attention, but is this new money, old money that's been collected from other parts then shown as 20 billion going into agriculture research. Have you seen any of that translated actually into some new programs based on the priorities from various regions? Can you comment on that?

**Christian Hoste:** Well, I don't have much information. But like you, I guess I am a little pessimistic about having fresh money and I think it's much more a political move than a financial one.

**Akio Takenaka:** Okay. Another comment?

Christian Hoste: I have the microphone, so I want to take advantage of that. I think the presentation about what Japan and Tsukuba University is doing in the Mediterranean region is a very interesting move and when you see also that the move that Tsukuba University is also representing now the Japanese universities in the region. So that's something that we should really use as a model that we may try to see how we can expand and work more closely regarding AGREENIUM that I briefly presented with six members, funding members. I've signed, I've given the priority to the Mediterranean region and so we can probably also visit much more comprehensive approach between the north bank of the Mediterranean and the southern bank of the Mediterranean with the European area. And so I think that's an interesting move and we will definitely follow up on that.

Koji Tanaka: My name's Tanaka from Kyoto University. Listening to the presentation by Dr. Hoste of CIRAD, I realized the importance of the collaboration between national and international agriculture institutions and the universities. Then, looking at the current situation in Japan, what is very weak is the collaboration between universities and the government international agricultural institutions. For example, in every university...not every university, many universities, there are some specific institutions such as the institute or centers for researching these specific areas. For example, the Center for Southeast Asian Studies, Center for Latin America Studies, and the North African Study Center in Tsukuba as we have seen. But collaboration between universities and the agricultural research institutions in governmental organizations such as under the Ministry of Agriculture is still weak. And then we are going to establish some, how I can say, linkage or forum combining the universities and the governmental agencies. But still it is in a very primordial stage. So in that sense, I would like to get some information how to develop the collaboration between the educational institutions or the research institutes in the universities and the international cooperation agencies in each countries. For example, in France, such as the trial. What are the difficulties when we try to combine the bridge between universities and the government?

Akio Takenaka: Okay. So Dr. Hoste, can you answer?

Christian Hoste: Well, I cannot say that I am pleased to hear that we are not the only ones facing the difficulties of bringing the research and the higher education of universities working together. But this a real challenge and the key question is much more...well, there are two aspects, I think. The first one is how do we mobilize our researchers to do more education linking in whatever the

contribution of the researchers into the curricula and the Master and the Ph.D. programs. That's very important and at least that's what we try to promote, but that imply also that in the evaluation criteria for the career of your scientists, you have some recognition of that work which is not purely research, but transfer of knowledge and I think that's a very important move. But clearly there is a different culture between the research and the researcher and the university academics. And one way is to go into that direction, I think, and to give recognition that the scientists can contribute to the programs there. So that's what....I will come back to you later, I think.

Akio Takenaka: Okay. Any other comments or can....oh, okay. Please, Dr. Singh.

Ram Badan Singh: I will attempt to supplement this explanation how to link the national agricultural, all other research centers with the university system. FAO had done a very comprehensive study of linking universities with research institutions to deliver their research results to the ultimate clientele and users. That leaving that apart, there is a general consensus by the GCARD process that the National Agricultural Research Institutions should be converted to NARS, NARI to NARS. What is NARS---National Agriculture Research System? So from "I" to "S", Institute system. In the system are included the institutes, the governmental departments; universities are a part of their system. NGOs, civil society, private sector, they are all part of the system. Now, NARS becomes part of the regional forum, for example, in Europe, European Forum for Agricultural Research for Development, in Africa, it's similar, In Asia, APAARI is the system where the NARS are members of and so on. So that is the way that you can link up. First, at a national level to convert the NARI into NARS, NARS becomes the member of the regional forum, another regional forum becomes a member of the global forum. And this is how they are linked together all the way from the national to the global level.

Akio Takenaka: Okay, thank you. Okay, Dr. Miyata, please.

**Satoru Miyata:** My name is Miyata from JIRCAS. I think the story is not simple like that. So, universities themselves have some system network. Also, at the regional and international level, they also have some network system. So, universities and national institute, in some cases, try to develop at their own networks and encourage the network working at each level. So, the point we have to focus on is--- first at the national level, how we can collaborate between the educational system and the research system. If we reach some agreement to act together, maybe we propose to the regional level. That's a step we have to do. So I respect the works of APAARI as a regional forum or GFAR, but we should not respect the individual university network system.

Akio Takenaka: Okay. Please.

Ganesan Balachander: I will attempt at what I have seen from different places and try to propose something. I don't know how easy it's going to be, but the incentive structure or system for pure Science, for basic research by university researchers is one thing, and that's publications whether it's pure or not, and that's what they're going to be interested in. But going into development, which is what we were talking about. How do you take up the results of the research into actions on the ground, for example? We need to have partnerships and how do you engage with partners from, let's say JIRCAS to a university to a developing country partner? There is a missing link which is the applied work and perhaps universities could also look at the incentive system, but also set up centers because ultimately, development is going beyond particular disciplines. Perhaps we will need an interdisciplinary approach where you bring in the social sciences or the human sciences into basic applied and natural sciences and so on. So perhaps, if you have centers within the universities, it's a stepping stone, centers for development or whatever. And then you could perhaps make a linkage between the university researchers working with these centers as the modal point which links up

with the development activities through JIRCAS or some other development partner. But I feel the incentives to systems prevent the researchers from actually getting involved in work because they might be looking at some very fundamental issues and the structures are very different.

**Akio Takenaka:** Okay. Any other comment about probably the national consortium or the network system inside rather than between the universities or between the universities and the national institute. Because I heard that the university has a lot of manpower, but deficient in funding, but national research centers have rather big funding, but no manpower. I think the collaboration between the universities and the national institutes is very important.

And again, any other comments on the national consortium or the network system? Or probably, the first important thing is the inside of the national consortium and the next is the kind of the bilateral relationship with, for example, Japan and other countries. And also, there is some kind of a network between the developing countries, we call it the "South-South Relationship". And also, I think that the most difficult thing is the kind of relationship between developed countries because it is a kind of mechanism like the CGIAR which is one good example, but I think that as of this morning--JIRCAS and CIRAD, are talking to each other about some collaboration. And also, there are some big global research alliances on the greenhouse gases in the COP15 last year and there were probably more than 30 countries talking about international collaboration on the greenhouse gases issues with each other.

So, do you have any comments or questions about it? Not only the presenter, but also yesterday's presenter are also here. And do you have any comments or any question of that kind of about the networking between the international or the national system?

I think it's very important for international cooperation to become a global issue. An international network is very important for the kind of network system between not only underdeveloped, but also with the developed countries Likewise, the CGIAR mega-program of the CGIAR is one good example of some kind of the cooperation project to help that system around the developed countries.

Okay, so any other comment or question?

**Shuichi Asanuma:** My name is Shuichi Asanuma from Nagoya University. Maybe this topic or this issue is related my presentation this afternoon because we are working on the JISNAS – Japan Intellectual Support Network in Agriculture Science, and we are trying to combine or trying to cooperate between universities and research organizations in Japan for international cooperation. Thank you.

**Akio Takenaka:** Okay, thank you very much. Any other comments?

Christian Hoste: It's a general comment, making a link between yesterday's presentation and this morning. We have seen that ACIAR and JIRCAS are quite active in the original forum with APAARI. But, to be honest, may be CIRAD in the European forum is the other. But then, we are clearly missing in the GFAR movement and the global conference of the GCARD process and the key role of advanced research institutions from OECD countries in general. How do we mobilize them to be a part and play a more active role in the global agriculture research agenda which is emerging from this process and what hold do they have in the governance of this global system? And clearly, we see that we have not yet mobilized or made the bride between research in the north and research for development. So I think that's something we may try to have as an initiative under the GFAR, to see in 2011 how the advanced research institutions can work more closely together. And clearly you

mentioned the mega-programs which are the CRPs of the CGIAR, but this is only part of the global agenda. And of course IRIS has something to contribute in these CRPs, but there are also other priorities in the global agenda raised by the original forum for which the CGIAR has no expertise or not its field. So how do we mobilize the IRIS to take the lead for these global programs which are not the mega-programs of the CGIAR? How do we really build this new picture, the emerging global system in agriculture research? And I think that's a challenge and maybe with ACIAR, JIRCAS, and CIRAD---we may start thinking about how do we mobilize the north to really work on this development issue?

## Akio Takenaka: Okay?

**Ganesan Balachander:** I'm sorry I keep coming back, but what you suggested triggered another thought, when you talked about the north to south, but there are a lot of moves afoot from south to south. For example, China with its need for mining resources and so on, has embarked into Africa in a very big way. Now on Embrapa, there is more information. Embrapa is also looking into Africa, India, as parts of its geopolitical considerations. It is looking at agriculture and support for certain African countries in terms of bilateral support. So there are all these other activities which are also being undertaken. This is good. However, this is not what the CG and others are looking at in terms of harmonizing donor support and promoting collaboration. These are individual activities, but these are something to be watched out for and to see to what extent these are all in line with addressing issues of climate change, issues of productivity and so on.

**Akio Takenaka:** Okay. Thank you very much. Okay, time has come and probably there will be some discussions about the network system this afternoon session also. And please prepare for the afternoon session. Okay, thank you for cooperation on this session and thank you very much again everybody for the discussion. Thank you very much.