JIRCAS International Symposium 2009:
Roles of Social Sciences in International Agricultural Research and Development

Transcript

General Discussion

Facilitator: Good afternoon. We would like to resume the session and go to General Discussion Session. The moderators will be from JIRCAS, Mr. Masuo Ando and also Osamu Koyama of the Research Strategy Office. I would like to invite Mr. Ando and Mr. Koyama to chair the session.

Masuo Ando: From yesterday to today, we heard 11 presentations. I'm afraid that some people already forgot yesterday's presentations. At first, I would like the three session moderators to have a short presentation to summarize each session and to propose some issues for discussion. At first, I'd like Dr. Furuya to present.

Jun Furuya: Thank you very much, Masuo. I'll try to summarize Session 1. First, Prof. Meyers talked about the globalized world economy and agriculture in developing countries. Second, Prof. Shobayashi talked about the multifunctionality of agriculture. And I talked about the impacts of climate change on the world food market.

In the first presentation, Prof. William Meyers insisted on the rapid technological progress and increasing demand which led to price decline, oil price surges in the 1970s and the collapse of the Bretton Woods currency system which led to price surges. Recently, interdependence with the food and energy market is a problem, so biofuel is the main actor of our analysis.

There are two main questions; one is, are these impacts persistent or temporary, and the other is, are prices more volatile?

In relation to the volatility of the price, I conducted analysis using the World Food Model in relation to climate change. We used this supply and demand model. Production plus import minus exports plus beginning stock minus ending stock is the total supply. On one hand, economic conditions and population will determine the demand. When the supply equals demand, market price is obtained. We will use such equilibrium price for overriding the policies. So this section shows the economic model where we think like the peak is paced and movements of the price variations are concentrated.

On the other hand, natural scientists think about relationship with aid and climate conditions. I think this supply and demand model or econometric model will be a candidate of the platform of interdisciplinary analysis.

Dr. Shobayashi talked about some multifunctionalities. There are three basic questions. First question was, is there a strong jointness between commodity and non-commodity outputs? The connection means, for example, the milk production and the possible landscapes. Milk is a commodity and pastoral landscape is a non-commodity output. This connection is one of the programs.

The second question was, is there market failure of the non-commodity outputs? Non-commodity outputs means loss is higher than the gain.

The third question was, are the governmental options efficient? If the answer is 'yes' for the three questions, the government should support the multifunctional need which insists on this framework.

I will try to summarize the three presentations.

First, William and I used the supply and demand model or econometric model. Macroeconomic and climatic conditions affect this market and we can get focus on the community output and we will evaluate the policies. On the other hand, Mikitaro analyzed the relationship of non-commodity outputs and the commodity outputs. Using the framework or the multifunctionality approach, he talked about the policy related to the multifunctionality. So the output will be policy evaluations.

I hope that our policy analysis or economic analysis will contribute to the development of agriculture in developing countries. Thank you very much.

Masuo Ando: Thank you very much. The next is Dr. Yamada please.

Ryuichi Yamada: I would like to summarize the results of Session 2. I would like to pick up only the important points of each presentation.

The first presentation by Dr. Mizuno: One example of an important lesson in Japan is rural livelihood improvement programs. These had contributed to the enhancement of agricultural productivity and rural livelihood. The experience of rural livelihood improvement programs in Japan is a typical example of participatory agricultural and rural development. The essential factors for successful rural livelihood improvement programs

are first, long-term commitment; second, the accumulation of problem-solving experience and third is social capital formation.

Second is the result of the presentation by Dr. Caldwell. Dr. Caldwell presented three very important concepts. First is beyond diagnosis, and second, beyond researcher-led on-farm trial to farmer innovation and invention of technology and third is beyond extension to scale out to farmer-to-farmer approach. In turn, it will be the effect of farmer-led approach. Farmer-led approach enables farmers to innovate and invent to develop a wide range of technologies for different farm conditions and, second, farmer innovation can speed up technology improvement.

The third is the result of the presentation by Dr. Werner. First, researchers contributed significantly especially at the beginning by identifying the key constraints and working with farmers and other stakeholders in the case study of Vietnam. But with time, the role and influence of researchers diminished and many stakeholders came to influence the final outcome. The lesson learned from this case study is that partnerships need to be based on sound partnership principles and should provide a way for adaptive scaling-out of research. Second, social science researchers have so much to contribute toward targeting research needs and poll system perspective.

Thank you very much.

Masuo Ando: Thank you very much. The next session summary is Yokoyama's please.

Shigeki Yokoyama: I think I don't need to summarize because our session is just the last one. I just want to raise issues for further discussion.

First, for Pandey, we are talking about public goods. So there are market failures and there are two types of market failures. One is traditional: less investment in technology development because there is an externality. The second type of market failure is related to the technologies and more importantly, we put importance on their being environment-friendly and you mentioned about natural resource management. That has no tangible benefit for farmers but there is a great benefit for the whole society. This is a market failure for farmers to adopt because of not enough economic incentive – how do you deal with those things?

The second is for Prof. Nishimura. Not only JICA, but also many international project implementation agencies use the logical framework for project evaluation which is evaluation based on the comparison of expected outcomes and the results. But, I want to ask you your own experience of long term observation. There are many changes, not

only expected changes but also unexpected changes which are positive and negative. How do you evaluate those unexpected outcomes?

For Prof. Yamaguchi, your talk is about the public, but who are they? We cannot think about normal distribution, mean, or standard deviation, something like that, because the public is so vast and the voice of a small number of activists you showed such as the example of a picture of a known NGO. But are they really representing the public or how do you treat the voices who are voiceless? That is my issue. Thank you very much.

Masuo Ando: Thank you very much for the three moderators. Now, we are going to have the general discussion. Based upon these three sessions, we are going to discuss freely and frankly. But in the beginning of the free discussion, I would like to speak about the viewpoint of discussion. Needless to say, the theme of the symposium is "Roles of Social Sciences in International Agricultural Research and Development." When we think about the roles of social sciences, we have to ask ourselves who are the users of our research. There are many kinds of people surrounding us, for example, farmers, extension workers, technical researchers, policymakers, traders or NGOs and so on. So who are the main targets of our research?

From the point of view, I'd like discuss the role of social sciences frankly. At first, I would like to discuss the policymaker; maybe very closely connected with Session 1 or Yamaguchi-san's whole presentation. Is there any opinion or comments on the roles of the policymaker or policymaking?

Yesterday, Dr. Meyers said that maybe one of the important researches is the normalization of market mechanism or something like that. Is there any comment or say more details about this matter?

William Meyers: Thank you. Actually, I'll say something about that but in response to your first question, I was going to mention that a number of us, I think IFPRI and FAPRI in particular I know for sure, are asked from time to time to testify before our legislators, like in the US Congress. When they have an issue that they want to develop some legislation and they know about people who are doing research and the impacts of different policies, they call upon us to come and testify in front of the committee. They don't always take our advice and our goal is not to recommend anything to policymakers but to show them if you choose to do option one, these are the consequences; if you choose to do option two, you have different consequences so that the policymakers can understand what the consequences of their decisions will be. Personally, we as an institution do not promote or advocate any particular policies but we give analysis of the impacts of policies.

On the market development question, my point there was that we can develop wonderful technology which is very important but if the farmers are disconnected from the market, they can't really take advantage of the benefits of the technology. So, I think we need both the development of the market linkages and also the improved technologies for them.

Masuo Ando: Thank you very much. Is there any one ?

Masami Yasunaka : The theme that we were talking about was to address the question of who are going to be the users of the results of our research. To my thinking or in my way of thinking, we are talking about agriculture and the issues in the rural villages and we want to talk about various problem-solving mechanisms and the science people and the people concentrating in agricultural research, as well as societal issues, who are trying to do their very best to come up with these issues. For instance, if JIRCAS can say that the ultimate goal is making proposals to the legislators for their policymaking benefits, then I would think that the social science research can be reflected in a policy. In that respect, I think social sciences is the only area in which policy recommendation can be made so we can say that this is a very major output that we can expect out of our research.

Maximo Torero: The research we do serve both places. It serves policymakers on one side in the sense that we can give them informed choices as it was mentioned before. We can look also at the global level, not only at the country level, and give them choices at the global level because sometimes countries try to make solutions which really will not solve the problem because the problem comes at the global level. But at the same time, the research in social sciences could significantly help farmers or farmer associations. If you want to link farmers to markets through contract farming or through improving farmer associations, farmers need to know also what the benefits are and which are the contract arrangements that they would also benefit from and will empower them.

Normally, when you do contract farming, you will have an incumbent agro-processor or an incumbent cooperative association of producers. Because they are monopsonists, there would always be the possibility of their taking advantage over the farmers. So, it is not only that the farmer does not comply with the contract but it is also that the farmer could be abused by the company when they do their contract together. They also need to know and be informed about the potential different ways in which they can engage in innovative contracts that would also protect them at the same time. So, I think it goes both ways. It is not only for the policymaker side but is also for the farmers and the information that they can use to better organize and to better connect to markets.

Masuo Ando: Thank you very much. President Iiyama please.

Kenji Iiyama: Thank you for the marker. There are big problems for the econo-social sciences. One of the important aims of JIRCAS is to reduce the extreme poverty and hunger which is quite an important factor of the MDGs. But quite importantly, how to increase the small farmers' income? That is quite important. How to increase the small farmers' income is deeply connected to the productivity of the crops and also the prices of crops but not market prices. How to set up the crop prices? That is quite an important factor. The crop price is very low compared with the industrial materials. We should say that the prices of crops should be increased significantly. That too is quite an important matter. But presently, the market prices of the crops are already very high but the income of the small farmers remains very low. That is quite an important issue. Why is the system still being kept at this time in order to clarify the structure of the decision-making on crop prices and also the farmers' incomes; to clarify that such structure is quite an important factor and also a responsibility for the Socio-economic scientists. Could you discuss about these systems?

Osamu Koyama: Thank you very much, Dr. Iiyama. This issue was already discussed in the keynote lecture. Dr. Torero introduced the study result of price transmission – how world price goes to the local price and so and so. I think that research area is a very cutting-edge area which we are now facing. But, this is the place to discuss the role of social sciences. I don't want to touch on the mechanism of that thing in detail but I am sure this is a very important area especially for economists. That is my understanding.

If you have something to add, please.

Maximo Torero: What I was trying to explain yesterday was the lack of price transmission to smallholders and the reason behind that is basically transaction cost and lack of infrastructure or poverty infrastructure which is because of ascending and asymmetric information which makes it more difficult for smallholders to negotiate in the market and to be able to profit from those increasing prices. So, you are completely right. There is a lack and there are missing markets and market failures that do not allow smallholders to be able to link. So one of the policy issues and link to social sciences is how we can help through impact evaluation of policies and through designs in all different institutional designs to minimize those market failures so that smallholders can, in the future, benefit from that. So it is not only an issue of increasing prices. It is not only an issue of better technology to increase productivity because we know if we increase productivity, prices will go down because we will produce more, but it is also an issue of reducing this transaction and transportation cost. For that, you need innovative designs behind.

Sushil Pandey: Thank you. I just want to add a point to that when we look at it in terms of the price, there is really an issue here on how we incentivize farmers at the same time to be

able to provide food to the poor people at a low cost. But I think if we look at in terms of the farm income rather than the price of the farm produce, I think the trade up does not look that bad because through technological change, you reduce the cost of production. That is really the story of the Green Revolution. If we look at all, the cost of production got drastically reduced as a result of the improved productivity and was able to keep the price low. At the same time, the farmers' income was going up. It was not that the farmers' income was going down. The cost of production was reduced much more than the falling price. So I think there is an income effect. If we look in terms of income effect, in addition to the pricing policies and so on, there is a clear implication for the technology that increases productivity and is able to maintain the farmers' income or to raise farmers' income.

Masuo Ando: Thank you very much. Our research output is not only for policymakers but also some extension workers and farmers. So, is there anyone who has some comments and opinions about the farmers, extension workers or stakeholders?

Werner Stür : Thank you. I just want to add one dimension to the things which have been added so far and that is capacity, the capacity of farmers and extension workers to actually take advantage of market opportunities like in the example I had in my presentation on the glut. The farmers were actually producing the wrong product and they did not have the technology to produce the right product so they didn't even know that they had a market opportunity. So it is not just building roads and things but it's the building capacity of the whole extension or innovation system to actually respond to markets. So there are very many technical incapacity building issues in there.

Masuo Ando: Thank you very much.

Kenji Iiyama : Thank you very much for some comments to my question. I think that this time in developed countries, the prices of the crops are kept steady by government subsidy. That is quite an important factor. But in developing countries, that is not available in the form of governmental help. Also, someone pointed out the cost reduction for production. But I think in this way, it is also quite a difficult situation in developing countries because even in Japan, the production cost is very high for the small scale farmers. If you could accumulate some cropping areas into a bigger size, production cost would go down. But that system is also very difficult to apply to the developing countries. Are there any comments?

Masuo Ando: Thank you very much. Oh sorry, Dr. Mizuno, please.

Masami Mizuno: Thank you. I want to add a few words about the income of small farmers. One of the important questions to be asked in relation to farmers' income is who gets the income in a farmer's household. Farmers do not live alone. He or she is a member of a household. So who, within the farm household, will get the income? Oftentimes in developing societies, male farmers will get the cash income. The income would then buy something not directly linked to the welfare of the members of the household. But for women farmers, when they get the income, they will spend more percentage of the household income to invest in the education of the children or on health conditions. Not just the increasing level of income but who will get the household income in a small household is more important. This is my experience in the countrysides in Asia and Africa. Thank you.

Osamu Koyama : Thank you very much for your observation. We should focus on the main issue of the symposium maybe because time is so limited. I mentioned the role of social sciences and social scientists and you may have many observations in terms of income generation and so on , but please let's concentrate on the main issue. Thank you.

Masuo Ando: We are moving from policy to farmers or extensioners and finally maybe the relations to researchers. Do you have any comments on that area?

Maximo Torero: Only two comments. One is regarding the smallholders that were mentioned before and the link to social sciences. I think there is a lot of work that has shown that in smallholders, labor usage is more effective and more productive. Although things have changed, it is no longer like it was when the Green Revolution happened and you wanted to increase yields. These days, what we are seeing is that there are a lot of standards that you need to comply to be able to link to dynamic markets. Japan, for example, has the highest standard in terms of food quality and food standards. That links a lot to the point that you mentioned before. To be able to comply with those standards, the smallholders need to have some economies of scale. That's where horizontal coordination is extremely important and that is why social sciences will help significantly in trying to develop ways in which you can align incentives of farmers so that they can coordinate horizontally. One example is what we can learn from microfinance to be able to extrapolate that to smallholders and to try to create institutional designs that will help to coordinate and have the economies of scale they need to be able to link to the dynamic markets.

The second topic which I think is very important for social sciences is the importance of prioritization of investments. Developing countries have very restricted resources and we need mechanisms and ways to prioritize investments. So, how we can use what we learned through social sciences to help policymakers, governments and farmers to

prioritize the way you put your investments. So, should I invest in the road or should I invest in extension services like what was mentioned before? What is giving me more returns or should I do packages and compacts of different things that create higher complementarities? That is pretty complex and requires a lot of analysis and return analysis to be able to prioritize.

John Caldwell: I was just listening to your comments and was thinking about the part about standards. I think in Session 2, there was a question about the role of education. I think there is an important role for very targeted focused education programs and I am thinking of two examples. One is not the work in Mali that I showed but a previous work I was involved in the '90s in producing vegetables for the European market in meeting the EU standards. This required that farmers develop a whole new set of skills, really a whole new framework of looking at the crops and making very refined decisions about pest management. That cannot be done in French. That needs to be done in local languages. The same thing is now happening with our current project in Mali on natural resource management. Again, we're looking at literacy programs, not on a general basis, but for women in marketing vegetables and also in management of natural resources. So, this is perhaps not the role of economists, but it is a social science role to design these types of very targeted educational programs which are closely linked to technologies and markets.

William Meyers: Yes, that brings to mind something else that is really connected to this comment and also the previous one. There are a number of places where smallholders have been operating under contract with some of the suppliers for goods for the European markets and places like that. The question was whether they are being exploited or if they are gaining from this relationship, this contract in farming. So, some studies have been done and the rather amazing results of the ones that I've heard about are that farmers who engage in this kind of contract farming to provide specific quality of production to a specific market also learned some techniques which then enable them to do a better job of their other farming activities; so that they might be producing vegetables for the EU or something else. But from what they have learned in doing that, they are also better at producing their other crops, their other rice or whatever other things that they are producing. So indeed, the social science studies of these farm relationships or the farming systems revealed information that was not well understood. So now understanding how these benefits occur is useful both for the private sector and for governments – they're interested in helping small farmers.

Masuo Ando: Thank you very much. To change the topic a little bit, in Nishimura's presentation, you said that the sustainability of rice production is dependent on the composition of the ethnic group. In this case, sociology or anthropology is a very

important factor to introduce the new technology. Is there any comment about this matter?

Yoshihiko Nishimura: I read something about these areas. So, today I didn't explain about the other information here. When I say "transfer of technology", I mean from the traditional or primitive agriculture to developed agricultures. One of the important factors is economy. Many scientists already discussed this part but as you know in the primitive agricultural society, the economy was at a self-sufficient level. Then in this case, how people form their own value. That is very important. That's the key. This one is quite related with what Dr. Yamaguchi presented. Who are the stakeholders? How do people judge the values and the needs? I told you, needs are the focus of interest. At that time, farming was still self-sufficient in the primitive agricultural areas. So, the next step will go to the economies of important factors, such as the currency for the final exchange of materials. But only, if they can develop their economy. If we have not gotten any currency and cannot buy—that is the case—we need to change the system, otherwise it is impossible. We cannot discuss the same categories. But now people in all rural areas because of more currency or because some will say that education is more important, will also require education. How to obtain such an education fee? This is from the currency. In this case, how can traditional farming supply the materials to the market? Really, we need to support such a marketing system. Traditionally, the materials do not have a big value in the market. Therefore, we need to perform economic value formations. Otherwise, even if a good product is achieved, technology assistance is still an important part. That is my experience.

Finally, how do stakeholders develop and target anyone? I think it is the farmers or growers. But also think about who is the consumer or buyer. My research was also carried out in Cambodia. It is about the structure of price fixation in the societies or markets. Now, we have to check the value chain. The production sold the materials to the market. Who is the consumer? Which part is more gapped? That is one of the important parts when we investigate the flow of the materials. That is my comment.

Masuo Ando: Do you have any question to ask from the presentor or something? Some presentors spoke about identifying the problem which is very important. I also think this process of identifying program is very important. And maybe social science has a big role in this process. Do you have any comment or opinion about this matter?

Tomiko Yamaguchi: I think one of the problems of identifying problems is that our identification of the problems might not necessarily coincide with the perception of the beneficiaries. There might be some gaps. So the issue here is how people like us will help beneficiaries to articulate what their needs are. I mean, perhaps microsociology can

be a part of the effort. But the problem I face is that because it's microsociology, when it comes to the issues related to public policies, oftentimes, I face difficulty in coming up with policy prescription because microsociology allows me to understand only a microcosm of what I'm looking at, not the bigger picture. The way I see is that perhaps people from different disciplines such as maybe economists or political scientists should work together in trying to figure out how to translate what's found at the local sphere to more policy relevant issue. I don't know if I'm making sense but anyway, that's how I see it.

Masuo Ando: Thank you very much. Dr. Mizuno, is there any comment about the roles of science, identifying problems?

Masami Mizuno: I'm just thinking if I ask myself; I am a social scientist and what role have I been playing in my life and the answer is either yes or no. But there are so many points, places, occasions in which social sciences can make a significant intervention in society which raise our technology level, assessment, or any type of innovation. I would say that social scientists are working at the nearest point of the end users of technology development, that is, consumers or farmers in general. We, social scientists, should keep in our mind that we are in the best position in society to work by contributing real facts or interpreting or transmitting real facts to the technical sciences or society in general. That is my present understanding of the role of social scientists. So our work is not in the laboratory but in the field in which we work. Thank you.

Masuo Ando: Thank you very much. Dr. Caldwell.

John Caldwell: I'm thinking about the different levels of goals. I think we have become fairly good in the last two decades at disaggregation by gender. We have tools to bring in women's perspective or women's goals compared to men, but I think what we're not very good at is within a village or rural community. You talked about controversy at a developed country level. There is a lot of controversy that's hidden, that there is a lot of social stratification and differences in villages that we don't really have good tools on how to bring this out without making too explicit the controversy that then causes fractures in the village. So, I think this is an area, maybe, where we need some new tools.

Kenji Iiyama: Recently, I have written very small reviews for the African Agricultural Development in Japanese. I pointed out in that review the importance of the human development index, which we call HDI. This one is quite important for the extension of agricultural technology and the information for the developing areas especially that most of the African countries have very low human development indexes. That is a quite big problem for the development of technologies to the transformation of technologies. Social

economic scientists should focus on how to improve HDI. That is quite a comprehensive index so we should collaborate with every other social scientist. That is my comment.

Masuo Ando: Thank you. Maybe, that's the ultimate final goal of social sciences. Any other comment? The floor is open now so you can speak Japanese, so please speak freely.

Dr. Pandey, in your presentation, you said that it is important to have needs assessment. Could you comment about this matter?

Sushil Pandey: I think this has been touched upon when you talk about needs assessment. It is ultimately done at the stakeholder level, the ultimate users. The processes have been quite well established on how to do that. We have evolved from the various concepts of the farming system research to rapid rural appraisal to the participatory process and so on. I think that part of the work has been well demonstrated in the two presentations that we had today. I just wanted to take the opportunity perhaps to make a response to the question asked by Dr. Yokoyama on my presentation. Can we do that?

You asked a question about, how you handle the externalities. Because farmers are concerned about their own income but the natural resource management options generate externalities which they do not necessarily value. It is for the larger society. I think that's a very good question and there are many cases where that happens. But I would also like to say that there are quite a large number of cases where we can find both of them going together. So we should have the farmer incentive, and at the same time, we should generate positive externalities or reduce the negative externalities. I would like to give an example of the input saving technology. For example, if the excessive use of fertilizers is causing pollution of the waterways and creating some of the environmental problems, then the technologies that allow farmers to put the fertilizers at the right time so that the crops will use that fertilizer efficiently will be very helpful. So, you can reduce the fertilizer quantity that you apply and if the crop is able to use that more fully then you have a win-win situation – you save on the fertilizer, the cost, and farmer benefits. At the same time, you have the positive environmental benefits.

Same thing applies to the pesticide use. We have been talking here about the 'no early spray' for example. If you don't spray early, then the system can recover by itself even if there are some pests present initially. That will save on the quantity of pesticides used. It will also save cost for the farmers at the same time, so farmers have the incentive. They are not producing externalities purposely but they are doing activities for their own benefit which at the same time produce externalities. There are many examples where one can give input use efficiency. If you are able to improve that and apply less, you have both.

Masuo Ando: Thank you very much. Is there any other person to ask?

Akira Hirano: Hirano from JIRCAS. My question could be a little bit off target. So I am a bit worried. I have a question to Dr. Meyers. It struck me when you listed in your presentation an opportunity which link the producers to the high prices. My background is more on technical science so I have little background regarding all of these things. But probably, there will be no straightforward answer to that. But if there's any opinion or if you have any idea on how you could do that which relates to any role of the social sciences, Then probably that would be the right context if you can give me such comment.

William Meyers: Yes. Well actually Dr. Torero spoke about that also. There are a couple of things involved in farmers getting the most benefit out of prices that are available in the market. Part of it has to do with the transaction cost or the cost of transport and the cost of getting products from the farms to the markets. So, that would indicate maybe infrastructure. Some of it has to do with information. There are a lot of places where farmers are not well aware of what prices are available that they could advantage of. So it is also related to information systems. Some of it has to do with very inefficient market institutions. I have heard, for example, a number of cases where it is part of the transaction cost or the transport cost, or the intermediaries are not very efficient at going from the farm to the market. So, there are a lot of things in there that can reduce the cost between the market and the farm; and therefore the farmer can benefit from higher prices and gain a better advantage. That is a lot of what probably Dr. Torero has said. He has done a lot of studies on this and has some other information about that too.

Masuo Ando: Thank you very much. Now it is time to close this General Discussion. But before that, I would like to ask Dr. Koyama to have a closing address for this session.

Osamu Koyama: It is difficult to summarize the whole discussion. As you have heard, social sciences deal with diverse issues – markets, income, farmers' income, rural society, technology development so and so. But my observation is that the ultimate goal of our activities is common because we are all studying human society. Maybe the goal must be the advancement of human development indicators or small farmers' income or livelihood improvements as Dr. Iiyama mentioned already.

The role of social scientists is difficult to summarize but we are scientists anyway, so there must be an indigenous role of scientists that is to perform research. We must not forget that part. Maybe we have to develop tools. We are already in the discussion, we learnt PRA for example, or value chain system or economic models and so and so. Those theories or tools still have a bigger room for improvement, because society is changing and

we have lots of uncertainties in front of us. There are a lot of new phenomena in front of us. So we must concentrate on the research issues, especially the identification of needs or identification of constraints, identification of differences in the markets, regional differences or cultural differences or even identifying historical experiences. That part was stressed in the Opening Remarks. The presentor said that the role of social science in agricultural development lies not only in the proper orientation of development but also in the discovery of the historical wisdom of human beings and its preservation for our common future. I agree with this idea. But through the two days' discussion, many people stressed another type of role of social scientists which is a more practical social role. In other words, direct involvement in real society such as participation in development projects or policy suggestion or policy advice, or the provision of information to investors or market people and so on. Those kinds of roles are also important especially since somebody also stressed that social scientists can be a very good link or mediator among the various stakeholders in the development phase. Also, these kinds of roles are expected more and more because the basic trend stresses that holistic approach or holistic evaluation is more and more needed even though the paradigm of development is changing from time to time. But I think more and more complex factors should be considered in the development phase.

Apart from the roles, there are some problems in the social sciences which were identified, not in the general discussion, but in the presentations. For example, research infrastructure in some areas is very weak. For example, the data collection or formal statistical systems are weak in some areas because other new areas must be analyzed. Then huge amounts are needed or required from our scientists but data is limited. In order to work practically, we need a good network of scientists including natural scientists and so on. Also, somebody mentioned about the role of OECD in policy settings in developed countries. But for the developing countries, there is no such mechanism to reflect research results and real policy settings. Maybe existing organizations can, for example, IFPRI is already playing a lot of that kind of policy advisory function, but the function of OECDs might be needed in the future.

Throughout the discussion, we have deepened our recommendation about the role of social sciences but of course we could not cover all the issues. We discussed only a limited part of a huge mountain but if we repeat this kind of activity, then maybe we can improve our activity and contribute to poverty reduction and other global issues from social sciences.

That is my summary. I do not know if I was able to summarize a lot. Thank you very much.

With this, we close the General Discussion Session. Thank you very much. Thank you for your cooperation.

JIRCAS Symposium
Role of social sciences in the international agricultural research and development
Date: November 4-5, 2009
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Session 1: Impacts of globalized world economy and climate change on agricultural sector and role of social science

Speaker & Title

- Professor William H. Meyers (FAPRI)
  - Globalized World Economy and Agriculture in Developing Countries
- Professor Mikitaro Shobayashi (Gakushuin C.)
  - Multifunctionality of Agriculture: the Role of Social Science in Identifying the Best Policy
- Dr. Jun Furuya (JIRCAS)
  - Climate Change and Food Security in Developing Countries and Role of Social Sciences

Outline of Session 1

- This session focuses on economic analyses of impacts of globalized world economy and climate change on agricultural sector. Trade liberalization of agricultural products will decrease benefits of farmers in importing countries.
- On the other hand, climate change such as drought and flood leads larger variation of food price. These global economic and environmental changes can affect the livelihood of the rural poor.

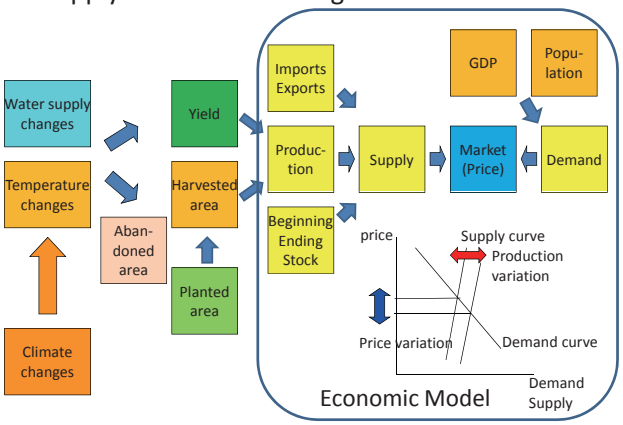
Outline of Session 1 (Cont'd)

- Analyses of impacts of the globalized world economy or trade liberalization on farmers' benefit are reported in Presentation 1.
- In relation to trade liberalization of agricultural products and mitigation of climate change, multi-functionality is the key issue for the agricultural development. The role of social science in the multi-functionality of agriculture is reported in Presentation 2.
- Analyses of impacts of climate changes on food security are reported in Presentation 3.

Macro economic condition

- Rapid tech. progress, inelastic demand
  - Price declines
- Oil price surge in the 1970's & Collapse of Bretton Woods currency system
  - Price surge, More persistent than weather shock
- Interdependence of food and energy market
  - Biofuels
- Are these impacts persistent or temporary?
- Are prices more volatile?

Supply and Demand of Agricultural Products



Multifunctionality

- First question
  - Is there a strong jointness between commodity and non-commodity outputs?
  - e.g. Milk & Pastoral landscape
- Second question
  - Are there market failures of the non-commodity outputs?
  - Market failure: gain < loss
- Third question
  - Are only government options efficient?
- If yes for the three question → government support

Socio-economic analyses of agricultural markets

- Macro economic condition
  - Basic trend
- Climate change
  - Increased volatility of price
- Multi-functionality
  - Evaluation of functions of non-commodity outputs