

Research Exchanges

Research Cooperation

Joint Symposium by agricultural policy research institutes of Japan, China and Korea

The Policy Research Institute MAFF (PRIMAFF) agreed, advancing research interchange with foreign countries, to found the Forum for Agricultural Policy Research in North East Asia, with the Institute of Agricultural Economics, Chinese Academy of Agricultural Sciences (IAE/CAAS) and the Korea Rural Economic Institute (KREI), for research cooperation.

On the basis of this agreement, the 2nd Symposium was held in Weihai, China on Oct. 8-9, 2004.

1. Topic: Food Safety and Security in an Era of Globalization

2. Description of Seminar

After the opening ceremony, researchers from the Japanese, Korean and Chinese institutes reported, commented and debated in 3 sessions.

Session 1: Food Security Policy in Northeast Asia

Session 2: Quality Assurance and Food Safety

Session 3: Agricultural Trade in Northeast Asia

3. Participants

Japan	Nishio Takeshi: President of PRIMAFF	and 5 persons
Korea	Lee Jung-Hwan: President of KREI	and 6 persons
China	Qian Keming: President of IAE/CAAS	and 10 persons
		Total: 24 persons

Note: Plans for future symposium

2005: 3rd in Japan (Tokyo)



Exchange of Researchers

A report on staffs currently overseas on assignment, those on assignment from overseas, and their activities.

1) Fellowship

SHUANG XI*

(Supply and Demand Analysis Section, Department of Food Policy and Evaluation; January 1, 2002 – December 31, 2004)

The difficult task of achieving harmonization of economic growth and environmental preservation calls for an environmentally sound development process. In the case of the severe desertification in the northern part of China where local residents live under conditions of poverty and environmental degradation, considerable research has recently been carried out on this issue. In order to utilize the research findings in local communities, I organized an international conference for scholars from Japan and China, entitled 'Development of Environmentally Friendly Agriculture in Northern China,' which was held at Huhhot, China in August 2004. I also edited the proceedings of the conference and published it under the same title. Solving the environmental problem in northern China requires the conversion of farmers' land utilization into the environmental-conservation type and the realization of farmers' income growth under such conditions. Therefore, how to include the farmers' income growth into an environmental preservation program is a key to solving the environmental problem.

* Research Fellow of the Japan Society for the Promotion of Science

Yasutomo KOJIMA*

(Food System Section, Department of Food Policy and Evaluation; April 1, 2003 – March 31, 2005)

In the agri-food system, corporate behavior plays an important role in the allocation of benefits, such as raw material cost reduction brought about by agricultural policy reform. One of my research projects is the empirical analysis of price transmission in the Japanese food industry based on a partial equilibrium model. So far, from the aspect of cost structure and market competitiveness, I have worked on the downward price rigidity in the Japanese bread baking industry during the period of declining wheat and flour prices since the late 1980s.

Another research project is an empirical examination of the total effect of introducing sugar beet direct planting on the consumers, taxpayers, market and farmers. Transplanting culture became increasingly widespread in Japan after 1960, but direct planting is expected to be extensively used because of its cost savings in labor and material, a distinct advantage considering the need for supply of domestic sugar in response to demand and international competition. However, the unit yield by direct planting is estimated to be lower than that by transplanting culture. Therefore, direct planting has both positive and negative impacts on the income of sugar beet farmers. Because of the multiple effects of direct planting, the working paper analyzes the total effect corresponding to various speeds of its introduction.

* Research Fellow of the Japan Society for the Promotion of Science

Gyunghee YOU*

(Rural Economies Section, Department of Rural Development Policy; October 1, 2004 – September 30, 2006)

In 2004, I published a research paper related to agricultural policy of South Korea, in particular the direct payment system. This paper was published in Hokkaido University's Review of Agriculture Economics under the title "A Study on Direct Payment for Rice Farming in South Korea". The content is as follows.

The 1990s was a period when South Korea was assailed by the wave of so-called agricultural trade liberalization, and the reduction of agriculture occurred very quickly.

Self-sufficiency in rice production was the main objective of the South Korean agricultural policy at that time, which was aimed at stabilizing the supply and demand of rice. However, because the country agreed to accept the minimum access requirements as a strategy for delaying the tariffication of rice in the Uruguay Round Agreement, agricultural problems quickly arose. The political power at that time had to desperately search for measures to keep agriculture alive in order to maintain a stable political system.

One of the remarkable characteristics of the Korean agricultural policy of this period was the promotion of structural reform supported by the financial budget, and another was the introduction of the Environment-friendly Farming Policy.

The Environment-friendly Farming Policy was implemented after the establishment of the Law for the Development of Environment-friendly Agriculture in 1997. Then, in 2001, the Direct Payment System for Rice Farming was introduced in order to maintain the functions of rice fields beneficial to the public and to use rice fields in an environment-friendly way, which further strengthened synergy with the Environment-friendly Farming Policy. The issues examined in this paper are based on responses to a questionnaire survey on the Direct Payment System for Rice Farming in South Korea.

When the results of the questionnaire are considered, farmers will likely have a higher estimation of such a policy. Moreover, concern for sustainable agriculture and environmental preservation has risen through the development of this policy.

The system will be reviewed in terms of the advantage to large-scale farmers through revising the upper limits of subsidy payments in the future.

* Research Fellow of the Japan Society for the Promotion of Science

Andrea PUFAHL*

(Food Consumption Section, Department of Food Policy and Evaluation; July 6 – August 20, 2004)

Ms. Andrea Pufahl is engaged in the mid-term evaluation of EU rural development policy as a researcher at the Institute of Rural Studies, the Federal Agricultural Research Centre, Braunschweig, Germany. The purpose of her stay at PRIMAFF was to obtain various information and data about rural development policy in Japan in order to compare it with EU rural development policy. She gave a presentation entitled 'Agriculture in Japan' at her home institution in April 2005.

Ms. Pufahl's activities during her stay were as follows:

1. Consulting with and translation through Tomoko Ichida as her host researcher
2. Desk research via the Internet and English publications
3. Interviews with government officials and scientists of various institutions in Japan:
 - 1) Interview at MAFF: Rural Policy Coordination Office, Section for Investment Aid for Farmers, Section for HMA (Hilly and Mountainous Areas) Direct Payment
 - 2) Interviews and consultation with scientists:
PRIMAFF, University of Tokyo, Kochi University
4. Research trip in Kochi from July 22 to 24, 2004: Interviews and consultation with farmers and staff of agricultural cooperatives in Otoyō Town
5. Participation in the RIETI Symposium "Agricultural and Policy Reform in the 21st Century" on July 28, 2004 in Tokyo
6. Presentations on European rural development policies at PRIMAFF

As a whole, Ms. Pufahl was full of curiosity and very active during her stay, partly because this was her first visit to Japan, in fact, her first time in Asia. Her questions and points of view were at times very refreshing and even stimulating for us. Our discussions with her provided a good opportunity to rethink Japanese agricultural and rural policy.

*Japan Society for the Promotion of Science Fellowship for the "FY2004 JSPS Summer Program"

(Tomoko Ichida)

2) Overseas Education

Different Attitudes toward Nature

Kyoko SATO

Food Safety Masters Programme, Wageningen University

On occasion, Japanese news is broadcast on TV in the Netherlands where I am presently living. Political news is rare; most coverage from Japan is about natural disasters such as earthquakes, typhoons or landslides. In fact, the word “tsunami” has become notorious and it is well known as originating from Japanese. I am often asked how the Japanese live in such a dangerous country and I was even advised to stay in the Netherlands.

Although the Dutch people experienced many severe floods up until the early twentieth century, they are not as vulnerable to serious natural disasters now. They are proud of making their land safe from the sea and as a result of this accomplishment, they do not perceive nature as something to be dreaded, but rather as something that they are able to overcome and control. The Netherlands is smaller than Japan and its nature is much simpler, which mostly likely strengthens the people's viewpoint.

The attitude of most Japanese toward nature is one of veneration, particularly for great natural creations such as towering trees. Dutch people appear to have a totally different reaction. They are also impressed, but they see these objects as just being beautiful and big.

I do not specialize in environmental study and I am not familiar with Dutch environmental policy or research. However, a unique opinion toward nature may come from consideration of the difference existing between the two countries.



Afsluitdijk (great dyke) was constructed in 1932 to prevent floods and it has created a huge artificial lake, IJsselmeer. The highway, including a cycling path, runs along the top of the dam. On the right side is the North Sea and on the other side is the lake. The height of the water surface differs for the two sides (North Sea level is higher). Different species of birds live on each side.

“Any Person ... Any Study.” The Source of Internationality at Cornell

Kentaro KATSUMATA

Graduate Student, Department of Applied Economics and Management, Cornell University

The unconscious awareness of one standard that I possessed when living in Japan disappeared as a matter of course. This is the most drastic personal change that occurred through my experience of studying abroad at Cornell University. Any race, any nationality, any culture, any custom, any ideology, and any accent exit here, and I have faced each of these including my own. In such a situation, empty words affected by only one standard are not effective for communicating with one another and do not work at all to persuade others. To be recognized as an independent person, I must establish a transnational perspective and use my own words based on the perspective. This might seem to complicate my life, but I feel comfortable because I can be myself. The Cornell community is literally a transnational world where any person from any place is given appropriate dignity. Such a community taught me the true meaning of “internationality”, which is completely different from “globalization” that accepts only one standard. At Cornell, I realized the internationality into which the world should mature. The title of this paper is quoted from the words of Ezra Cornell, who is the founder of Cornell University. His founding vision, which I see as the source of the internationality at Cornell, is written on the school badge and is fostered by the Cornell community: “I would found an institution where any person can find instruction in any study.” – Ezra Cornell, 1865



Statue of Ezra Cornell, who is the Founder of Cornell University

Attendance at International Conferences and Researches Abroad, etc.

Affiliation / Name	Function	Place of Assignment	Period of Assignment
Director General			
Takeshi Nishio	Meeting of the three directors on the subject of research cooperation between Japan, China, and Korea	China	June 22 - 25, 2004
Takeshi Nishio	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	China	October 7 - 10, 2004
Department of Research Planning and Coordination			
Tsukasa Chiba	Mexico: field survey on the impact of integration and restructuring of the North American agricultural market on farming and farm communities, and on the role of agribusiness multinationals in the restructuring process	Mexico	August 21 - 29, 2004
Masashi Tachikawa	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	China	October 7 - 10, 2004
Masashi Tachikawa	Europe: survey on policies on coexistence of GM and non-GM crops; workshop on the Cartagena Protocol	Germany, Denmark	October 30 - November 8, 2004
Masashi Tachikawa	US: field survey on environmental payment policy and rural community development policies	US	December 5 - 16, 2004
Policy Research Coordinator			
Masato Ito	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	China	October 7 - 10, 2004
Masato Ito	France: survey on the agricultural modernization law (basic law) and related matters	France	March 19 - 27, 2005
Akio Yamamoto	UK: survey on criteria for evaluating direct payments as these relate to the multi-functional roles of agriculture and agricultural communities, and on the cost of such payments to the government	UK	March 13 - 20, 2005
Department of Food Policy and Evaluation			
Kunihisa Yoshii	US and Canada: field survey on administration of agricultural stabilization policies	US, Canada	February 21 - March 4, 2005

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Atsushi Tanaka	UK: survey on criteria for evaluating direct payments as these relate to the multi-functional roles of agriculture and agricultural communities, and on the cost of such payments to the government	UK	March 13 - 20, 2005
Hiroki Sasaki	Workshop on evaluating agri-environmental policy, and joint agriculture and environment working group meeting	France	December 5 - 12, 2004
Hiroki Sasaki	Expert participant in compiling the fourth edition of the OECD's Agri-Environmental Indicators	France	January 24 - April 18, 2005
Junichi Ito	Yunnan Province, China: field survey to provide data for a comparative analysis of development, exploitation, and conservation of shared agricultural and forestry resources in Japan, China, and the UK	China	May 25 - June 1, 2004
Junichi Ito	China: joint study on development of trade models for farm products, and field survey on evaluating agriculture's multi-functional roles	China	August 31 - September 6, 2004
Junichi Ito	China: field survey on evaluating agriculture's multi-functional roles	China	November 23 - December 10, 2004
Junichi Ito	Yunnan Province, China: field survey to provide data for a comparative analysis of development, exploitation, and conservation of shared agricultural and forestry resources in Japan, China, and the UK	China	March 8 - 17, 2005
Shunji Oniki	China: participation in a joint China-Japan symposium on China's environmental challenges, and field survey on revitalization of regions that practise eco-friendly farming	China	August 5 - 14, 2004
Shunji Oniki	China: field survey on farmland conservation and the livestock economy	China	March 6 - April 8, 2005
Tomoko Ichida	Germany and UK: field survey on actual state of LEADER programs involving community participation	Germany, UK	October 10 - 21, 2004
Junko Kinoshita	Invitation of young leaders from the Lebanese government	Lebanon	June 19 - July 1, 2004

Affiliation / Name	Function	Place of Assignment	Period of Assignment
Department of Rural Development Policy			
Toshitaka Katsuki	South Korea: fact-finding survey on vegetable production and distribution	Korea	September 6 - 9, 2004
Takeshi Fujie	China: field survey on management and maintenance of shared resources in farm communities	China	November 30 - December 10, 2004
Department of International Policy			
Yasuo Watanabe	Meeting of the three directors on the subject of research cooperation between Japan, China, and Korea	China	June 22 - 25, 2004
Yasuo Watanabe	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	China	October 7 - 10, 2004
Yasuo Watanabe	Australia: field survey on concerning safety securing of genetically modified agricultural products	Australia	March 6 - 12, 2005
Shoichiro Kawahara	China: field survey on analysis of the effectiveness of policies for systematizing agriculture and stabilizing markets	China	October 5 - 23, 2004
Atsuyuki Uebayashi	Intensive summer course on the GTAP model (general equilibrium model)	US	August 5 - 16, 2004
Shotaro Inoue	Thailand: field survey on state of efforts to enhance value added in agricultural production and agricultural exports	Thailand	February 20 - 27, 2005
Yoshihisa Aita	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	China	October 7 - 10, 2004
Takeshi Sakurai	South Asia: community resource management survey on policy studies on eliminating poverty	Sri Lanka	August 26 - 30, 2004
Takeshi Sakurai	Field survey conducted as an expert participant in the Asian Productivity Organization (APO) project "Survey on Rebuilding Local Communities"	Laos, Thailand	November 7 - 14, 2004
Takeshi Sakurai	Zambia: field survey for the project "Quantitative Evaluation of Irrigation Drainage Performance in Basin Water Cycles"	Zambia	December 13 - 24, 2004

Affiliation / Name	Function	Place of Assignment	Period of Assignment
Takeshi Sakurai	Field survey for the project “Clarifying the Connection between the Vulnerability of Farmers and Soil Deterioration in the Sahel, with Observations on Policy Support” (financed by the Ministry of the Environment’s global environmental research promotion fund)	Burkina Faso	February 20 - March 15, 2005

Research Seminar

1) Onigiri Omusubi* Kondan-kai (Brown Bag Lunch Seminar)

The “Onigiri Omusubi* Kondan-kai” is a lunchtime research seminar held at the Institute’s branch office at Kasumigaseki with objectives to providing opportunities for frank discussion on various issues related to agriculture and agricultural policies. During fiscal 2004, learned persons invited to deliver a lecture are as follows:

- April 6, 2004
“A New Administration and Agricultural Policies in Canada”
Reported by Dr. Leonard Peter Apedaile (Professor Emeritus, University of Alberta in Canada)
- June 24, 2004
“A Current Situation on GMO”
Reported by Takaharu Hatanaka (President, Society for Techno-innovation of Agriculture, Forestry and Fisheries)
- July 8, 2004
“A Suggestion on Slow Fish -Global-friendly Food Culture and Japan’s Challenge-”
Reported by Masashi Nishimura (Manager, International Section, Japan Fisheries Association)
- July 28, 2004
“A Current Situation on Tuna Cultivation Industry in the World”
Reported by Dr. Makoto Miyake (Scientific Advisor, Federation of Japan Tuna Fisheries Co-operative Associations)
- August 25, 2004
“Japan’s Agriculture and Food Consumption from the Perspective of Food Supply and Demand Table”
Reported by Katsuya Takahashi (Assistant Director, Food Policy Planning Division, General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries)
- September 3, 2004
“A Summary of Agreement on WTO Framework”
Reported by Takehiro Osugi (Director, World Trade Organization Office, International Affairs Department, Ministry of Agriculture, Forestry and Fisheries)

*Onigiri and Omusubi are rice balls and typical Japanese food for outings.

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2) Summary of the Research Conference

Summary of the research conference with guests from foreign countries

The Possibility of Rice Intensification in Developing Countries – In Relation to the International Year of Rice 2004

Mizuno Masami

IDS, College of Bioresource Sciences, Nihon University

May 21, 2004

The System of Rice Intensification (SRI), which has been developed in Madagascar, is an integrated and less costly method for intensive wet-rice farming to obtain a higher level of yield from a limited land area. The SRI method consists of several important but already-known practices of rice cultivation. The point is that it requires not the introduction of new seeds but only the employment of rice cultivation practices that do not necessarily use any purchased inputs. When compared with the wide-space transplanting method once popular in Japan, it can be pointed out that, while Japan's method of wide spacing is an integral part of intensive control of rice as a crop, SRI seems to depend on the basic idea of rice as a living plant, so that what is required through human intervention is to provide an appropriate environment in which rice plants are allowed to grow naturally. SRI can provide various opportunities for resource-poor peasants in developing countries. Saving agricultural water resources and land area under rice cultivation are examples of what is most important in terms of sustainable agricultural development as well as being the easiest to achieve without any significant change in rice production practices.

(A) Organic Agriculture in Europe and Germany: Policy, Market and Research Approaches

(B) Nutrient Cycling in Japan: A Comparison with Germany

(A) Guido Haas

Institute of Organic Agriculture, University of Bonn

(B) Sonoko Dorothea Kimura

Graduate School of Bio-Applications and Systems Engineering, Tokyo University of Agriculture and Technology

October 28, 2004

The influence of nutrient cycling on the environment has brought about the global problem of increased anthropogenic nitrogen production. The problem concerning nutrient cycle in Japan is the increase in surplus nitrogen due to chemical fertilizer and purchased food and feed, and the increase in disposal of human and livestock excreta, that is not used as manure. It is important to regulate the purchase of nitrogen, and to create a regional nutrient cycle. The connection between arable and livestock farmers is also important.

In Germany, an in-farm nutrient cycle has been established at each farm, unlike in Japan, where a regional nutrient cycle was established in the past. Farmers manage almost half of EU's land area, and agriculture is recognized as having a major impact on Europe's environment. Agriculture is responsible for a large share of the groundwater, surface water and sea pollution by nutrients. Thus, agriculture, especially organic agriculture, is strictly controlled by EU regulations. The EU's organic regulation governs the use of seeds, herbicides, synthetic fertilizers, growth hormones, antibiotics, and genetically modified organisms. It also includes guidelines for plant and livestock production, food processing, accreditation and control/inspection systems. All farmers who fulfill the organic agriculture standards receive direct payments.

Organic agriculture is a management system, which is in harmony with nature, perceiving and enhancing soil fertility, working as much as possible within a closed system and drawing upon local resources.

In light of the benefits that organic agriculture offers to the local society, Renate Künast, Federal Minister of Consumer Protection, Food and Agriculture, has set a goal to increase the amount of organically farmed area to 20% of Germany's total agricultural acreage by the year 2010.

Agricultural Biotechnology – Meeting the Needs of the Poor?

Prabhu Pingali

Director, Division of Agricultural and Development Economics, Food and Agriculture Organization of the United Nations (FAO/ESAD)

November 8, 2004

On May 17, 2004, the FAO released its annual report “The State of Food and Agriculture 2003-04” subtitled “Agricultural biotechnology: Meeting the needs of the poor?” The key findings in this report are outlined below.

Firstly, biotechnology, including genetic engineering, can benefit the poor if they have access to suitable innovations. However, neither the private nor the public sector has invested significantly in new genetic technologies for the so-called “orphan crops” such as cowpea, millet, sorghum and tef that are critical for the food supply and livelihood of the world’s poorest people. One of the key constraints that many developing countries face in adopting and integrating biotechnological innovations is the lack of agricultural research capacity particularly in plant and animal breeding.

In this regard, secondly, the gene revolution is quite different from the green revolution in which the challenges included public research for public goods, coordinated international efforts and explicit strategy for technology transfer. Private sector research for private goods, proprietary technology and technology transfer through the market are specific to GMOs. Private sector research dominates global technology. The world’s top ten transnational bioscience corporations spend nearly \$3 billion per year on agricultural biotechnology research and development. Private biotech research in most developing countries is negligible. Brazil, China and India, which have the largest public agricultural research programs in developing countries, spend less than half a billion dollars each annually.

Thirdly, therefore, the public sector must act decisively to ensure that the needs of the poor are met. The following public actions are required to bring biotechnology to the poor.

- Detailed inventory of prospective biotech products by crop, trait and zone
- Ex ante* analysis of the impacts of technologies on productivity and livelihood of the poor
- Focus public resources on needs of the poor
- Identify sources and mechanisms for partnership
- Identify and overcome small-farmer constraints to technology access and use

US Department of Agriculture Policies on Sustainable Agriculture: The View from Ohio

Richard Moore

Ohio State University

November 18, 2004

I shall begin by enumerating the reasons behind the introduction of sustainable agriculture in Ohio.

First, Sugar Creek, which flows through the state, was, to the great dismay of residents, declared the watercourse with the second highest level of bacterial, nitrogen, and phosphorus contamination. It rivals the Dotonbori River for seriousness of pollution. The reasons for this sorry state of affairs include ecosystem changes precipitated by single crop rotation, soil erosion, and seepage of fertilizer (nitrogen and phosphorus) into the river, all resulting from large-scale cultivation of the export crops corn and soybeans.

Second, the amount of barnyard manure being flushed into the river has been increasing as large-scale dairy farming and other forms of agribusiness have evolved. That has led to an increase in bacterial, nitrogen, and phosphorus contamination.

Next, I describe the characters of producers toward sustainable agriculture. Corn and soybean farmers require a larger area than do small-scale dairy farmers in order to develop land and rotate crops. Because of the high price of land, almost all corn and soybean farmers both own and rent, unlike small-scale dairy farmers. Not renting land and having heirs are two hallmarks of sustainable farming.

Consumer attitudes toward organic farm products (including those that are pesticide- and GMO-free) were as follows. Women are more willing than men, and non-Caucasians are more willing than Caucasians, to spend more on organic farm products; families with higher incomes and that include seniors or children show a similar willingness to spend more.

The “Agriculture in Concert with the Environment” program run by the US Department of Agriculture gives primacy to the technical and production fronts. Specifically, its objectives are to promote cooperation among relevant organizations, and to develop new scientific techniques and applications in the field of sustainable agriculture. Sustainable agriculture also has a societal aspect: historically, as in Japan, it emerged as a social movement rooted in local communities. Nonetheless, organic farm products in the US are primarily market-distributed. In that regard, the question of certification of organic farm products and how to pay for it has been a major problem.

Consumers continue to show an interest in organic farm products. Yet the price of such products is in decline. Meanwhile, local demands for more rigorous steps to control water quality and conserve the environment promise to become more insistent than ever. Under such conflicting conditions, some favorable, others hostile, sustainable agriculture in the US today stands at a crossroads.

Fruit Vegetables in Korea

Yong-Sun Lee, Ph.D.

Head of the Fruit Vegetable Outlook Team, Rural Outlook and Information Center, Korea Rural Economic Institute (KREI)

November 25, 2004

Production value in fruit vegetables has increased 5 fold over the past twenty years and their share is the largest in the vegetable category, exceeding that of flavor vegetables. Fruit vegetables include watermelon, cucumber, strawberry and green pepper. Planted area for fruit vegetables increased significantly in the first half of the 1990s, while it has been on the decrease since then. Greenhouse area accounts for 70–80% of the total planted area. The factors in increasing greenhouse area are considered to be the rise in domestic demand for fruit vegetables and governmental support for maintenance of facilities in the 1990s.

Per capita supply of fruit vegetables increased in the 1980s and 90s, while it has been decreasing slightly since 2000. Supply is expected to decrease due to a lack of labor in the mid-term.

Thanks to expansion of facility farming, fruit vegetables are consumed throughout the year and consumers’ preference for quality is rising.

The farmers’ price for strawberries is stable at a relatively high level, while that of the other fruit vegetables varies significantly. Farmers decide what to produce, looking at the price trend.

Paprika is produced mainly for export to Japan and the value continues to grow. On the other hand, import of fresh products is prohibited due to quarantine requirements for produce from countries other than Japan and New Zealand. Import of tomatoes for processed use and frozen strawberries from China is on the increase.

Brazilian Agribusiness: General Situation and Trends of Farm Trade

(Special Seminar on the WTO/FTA Project)

Sérgio Rodrigues dos Santos

Second Secretary, Embassy of Brazil in Tokyo

December 9, 2004

Brazil has ninety million hectares of available farming area that remains unused; hence, agriculture has great potential. Agribusiness plays a key role in the nation’s economy, accounting for 34% of the GDP. Agricultural production soared in the 1990s, primarily because of gains in productivity. Two items for which production increased in this period were soybeans and meat, both of which are also important exports. Agribusiness accounted for 42% of Brazil’s total exports in 2003. Soybeans, meat, and forest products are the main agribusiness exports, with shares of 26.5%, 13.3%, and 16%, respectively. The primary destinations for these exports are the EU, the US, and then China. Both the exports and the export destinations are more diverse than they used to be. Asian countries in particular have assumed greater prominence in recent years. The level of agribusiness imports is much lower than that of exports: agribusiness accounted for a mere 9.9% of total imports in 2003. Wheat has the highest share of any single agribusiness import, at 21%. Virtually all wheat imports come from Argentina. Brazilian agriculture’s most serious weakness is the underdeveloped state of infrastructure in the transportation sector. Other obstacles to exports

are SPS issues and agricultural subsidies in countries that import farm products. Brazil is seeking improvements in these areas at the WTO negotiating table.

Global Food Security: Can We Meet the Target Set by the World Food Summit?

Dr. He Changchui

Assistant Director-General and Regional Representative for Asia and the Pacific
Food and Agricultural Organization of the United Nations
December 15, 2004

Access to food is a basic human right, yet the fact is that of the world's 6.2 billion people, 1.2 billion live below the poverty line (a dollar a day), and 825 million are malnourished. At the 1996 World Food Summit, therefore, the international community made a commitment to halving the number of malnourished by the year 2015.

The subsequent decrease in the number of malnourished people has fallen behind target; indeed, some regions have actually experienced an increase. Because the food supply has been increasing at a faster pace than the population, the percentage of malnourished people has fallen; however, their number has climbed due to problems with food access and distribution. The FAO believes that, while a stable food supply is important, access to food is even more so.

Whether or not we can achieve the goal of ensuring food security will be determined by a host of factors. These include our success in eliminating poverty, the growth in population, increased access to food, sanitation and hygiene, the institutional environment, the external economic and political climate, and occurrence of natural disasters. In Asia, natural and man-made disasters are also a grave threat.

Seven issues will come into play in achieving the goal: (1) population growth; (2) poverty in rural communities; (3) the question of development and the environment, especially the issue of water; (4) as far as policy reforms and liberalization are concerned, providing a safety net for small farmers; (5) globalization; (6) science and technology, especially giving small-scale farmers access to high tech and other technologies that have hitherto been largely monopolized by the private sector; and (7) institutional problems. These issues are all closely interrelated.

Achieving the goal will require a coordinated domestic-international strategy that addresses the following five needs. First, each country must frame its own comprehensive food-security policy, one that includes measures for providing food access. Time schedules and specific numerical targets will be valuable tools in that regard. Second, food security should assume a central role in development strategy, with coordination being achieved between different government ministries. Third is increased funding: agriculture should receive a bigger share of the pie. Fourth is the importance of regional cooperation across borders. Fifth is the formation of a common front at home and abroad to combat hunger.

What we hope for from Japan is its continued support as one of the world's leading donor nations. Japanese ODA plays a major role in Asia. It is also important that the Japanese government take steps to foster awareness of food security among developing countries.

Rice Growing in Korea: Recent Trends and Future Prospects

Jaehyeon Lee, Ph.D.

Associate Professor, Faculty of Agriculture, Kagoshima University
December 15, 2004

The Government of Korea has implemented a rice market price support system through a government rice-purchasing program and a high price for rice is maintained. The government also implemented a comprehensive plan on rice industry for the year 2004 to achieve three main goals: a market-oriented distribution system; stabilization of farmers' incomes; and maintenance of the production infrastructure. It was also announced that the government rice-purchasing program is to be abolished in 2005.

On the other hand, it is noted whether or not Korea's developing country status is ensured and how delaying tariffication of rice is dealt with in WTO agricultural negotiations.

A look at the agricultural situation in Korea compared with Japan under these circumstances

shows that there are no part-time farm households in Korea and the aging population in rural areas is advancing at a faster rate than in Japan. Production cost is about half of that in Japan, but land rent accounts for a larger share of the cost. The percentage of commissioned farm work is higher. In Korea, farm management by joint stock companies is permitted, but the most common form of management is the farming association corporation. In Korea, projects are carried out with the aim of expanding the scale of farm households, but agricultural land has not been accumulated by responsible people.

With the decrease in the quantity of rice consumed, supply and demand have basically been in a surplus state, and production has been adjusted on 27,000 ha every year since 2003. The government has announced that in 2005, it will shift to a direct payment policy, for example, expanding the direct payment budget to 10.8% of the agriculture and forestry budget. The government is studying agricultural land reforms to conserve farmland and ensure that it accumulates in the hands of responsible people through total quantity management.

Multifunctionality, Rural Development and Policy Adjustments in the European Union

John Bryden

Director, UHI PolicyWeb, Emeritus Professor, University of Aberdeen

February 16, 2005

In the EU, multifunctionality has become a major justification for the continuation of the Common Agricultural Policy and related subsidy payments to farmers. It has also become one of the policy tools used to deal with 'public bads' produced by over-intensive farming. As such, it has inevitably been a key part of its stance in the EU's foreign policy, specifically in the current WTO Trade Round.

As international and internal EU pressure mounts to remove subsidies that encourage surplus commodity production, multifunctionality is also forming a key part of what the EU calls 'rural development policy'. In particular, agri-environmental schemes have become an increasingly important part of this policy, delivering economic development of rural areas or territories.

Most research on the topic would suggest a rather wide agreement that agriculture commonly produces both public goods and public 'bads'. However, less is known about the relationships between the production of commodities, and the parallel or 'joint' production of public goods and bads, and about the impact of different policies on these relationships. Moreover, practically nothing is known about the relationship between such public goods and bads and territorial rural development in different European contexts. New research projects designed to increase our knowledge and understanding of multifunctionality is lastly outlined.

A Study on the Development of Farmers' Economic Associations in China

Wang Dong-yang

Research Institute of Agricultural Economy, Chinese Academy of Agricultural Science

March 1, 2005

After the establishment of new China, agricultural villages made the transition from agricultural cooperation (1949-1957) and people's communes (1958-1977) to the present system of farmers' undertaking management.

With the development of a market economy, various organizations were formed in agricultural villages. Among them, farmers' economic associations are expected to play the most important role in developing Chinese rural economy.

Farmers' economic associations comprise economic communities, sale-purchase cooperatives, credit cooperatives and specified economic associations.

In recent years, farmers' specified economic associations were rapidly established and amounted to more than 150,000 organizations by 2004.

The central government has taken measures, such as construction of model areas, to support farmers' specified economic associations since the middle of the 1990s.

In 2003, the 10th National Convention of People's Representatives decided to make inquiries regarding the enactment of "a law for farmers' specified economic associations". Regulating farmers'

economic associations, including registration of corporate bodies, is very important because it would directly affect the future of farmers' organizations and farm management. Close attention must be paid to this movement.

Rice Farming Since Rice Renegotiations in Korea: Present State and Challenges

Taegon Kim

Agricultural Policy Research Center, Korea Rural Economic Institute (KREI)

March 17, 2005

In Korea, rice is an important crop in terms of total production value, farm income, and food self-sufficiency ratio. The government has long continued to implement a price supporting policy for rice in order to balance city and farm community incomes.

A comparison of agriculture in Japan and in Korea shows that the food supply capacity has fallen in both countries and that they maintain high self-sufficiency in rice that is the only staple food. However, the dependency of farm households on agricultural income, the full-time farm household rate, and the share of rice in agricultural income are all higher in Korea than in Japan.

Regarding the supply and demand for rice, annual per capita rice consumption is falling (about 83 kg in 2003) and this decline consumption boosted the inventory ratio to 30% by 2005.

Rice is imported through state trade, and although it is not used as a staple food, it is predicted that in the future, 10–30% of the minimum-access rice will be sold on the market as a staple food.

It is also predicted that in Korea, oversupply will lower the farmers' sales price. Beginning in 2005, a new direct payment system will be implemented to compensate rice farmers' income. Under the system, a target price is determined based on the average price in production areas and the government compensates farmers with 85% of the difference between the target and market prices in a given year by combining a fixed and a variable payment. When the future price of rice was predicted using the KREI-ASMO model, it was revealed that the price will fall sharply, even if the income compensation system is taken.

Future challenges to be carried out include lowering the production cost as well as replacing rice production with production of other crops in order to stabilize rice supply and demand.

China's New Trends of Agricultural Policy and Demand and Supply of Food (Joint Research Conference by JIRCAS and PRIMAFF)

March 29, 2005

(A) Changes and prospects of demand and supply of food in China

Qin Fu

Deputy-Director, Institute of Agricultural Economics, Chinese Academy of Agricultural Sciences

Diversification of food consumption in China has been an outstanding feature since the 1990s. Grain and vegetable consumption of urban people has decreased year by year, while consumption of vegetable oil, poultry and milk has increased. The same trend has been observed in rural areas, but the share of grain consumption is much higher than in urban areas. On the other hand, China's grain production has decreased since 2000, although it had been increasing until then. With regard to grain trade, China's export has largely exceeded its import. For the past few years, rice has been a main export product shipped to Korea, Malaysia and Indonesia, reaching a volume of nearly 2.5 million tons. China has been importing wheat from Canada, the US and Australia. Export and import quantities of grain have been significantly affected by annual changes of domestic production in China.

To forecast demand and supply of grain in the future, we developed a model based on estimated consumption elasticity and concluded that the volume of demand would be 0.53–0.58 billion tons while the supply quantity could remain at 0.51–0.55 billion tons by the year 2010. Thus, China's self-sufficiency target for grain (95%) would be achieved.

(B) New trends of grain production and distribution policy in China

Xu Xiaoqing

Deputy-Director, Department for Rural Economic Development, Research Center of the State Council, PRC

China's grain production has decreased since 2000, because low commodity prices due to abundant crops in the late 1990s discouraged farmers. The other reason is that the government purchasing system has not been successful. In order to tackle these problems, the Chinese government introduced agricultural support policies advocating the "increase of farm income" in 2004 and "promotion of total production ability" in 2005. Concrete items of the 2004 support policy are agricultural tax reduction, direct subsidies to farmers, good-quality seeds and large-scale machines, etc.. The 2005 support policy includes strict protection of arable lands, improvement of agricultural water facilities, and extension of technical service.

Implementation of these policies has achieved increase of farm income, stabilization of grain production and establishment of a market-oriented grain distribution system in major producing areas. At the same time, responding to recent changes in domestic demand and supply, the Chinese government has adjusted agricultural trade policy to stabilize domestic commodity prices by increasing wheat import and decreasing corn export.

However, the agricultural sector still faces many problems such as a low investment rate, weak mechanism for increasing income and serious income divide between urban and rural areas. Thus, China needs additional reforms to improve its system of tax, finance, distribution, public service, etc..

3) Summary of the Seminar

Summary of the Seminar by foreign countries

Decoupling: Results and Policy Implications

Carmel Cahill

Head of Division of Policies, Trade and Adjustment Directorate for Food, Agriculture and Fisheries

Organisation for Economic Cooperation and Development (OECD)

May 28, 2004

In 1987, the OECD Ministerial Council Meeting reached an agreement on the principles of agricultural policy reform, and a 1998 meeting of agriculture ministers asserted the principle of "decoupling," which entails a transition to support measures that are "decoupled" from production and prices.

Many countries have implemented agricultural policy reforms in line with this principle, and the percentage of total subsidies to farmers accounted for by price supports has dropped considerably. (It is currently around 60% in the EU and 40% in the US.) Maintaining high prices by means of price supports not only burdens consumers; it also necessitates the imposition of import barriers in the form of tariffs and the like, and the surpluses generated as a result of protection create the need for production controls and export subsidies. Agricultural policy reform makes headway when governments shift to less market-distorting policies.

According to the OECD's analysis, price policies have a broad but limited effect on a wide range of players; they are not effective as a means of subsidizing farm incomes. Direct payments that are decoupled and targeted are far more efficient and effective, for they give those engaged in agriculture a larger share of the benefits. Moreover, our analysis shows that price policies fail to perform the role of redistributing income, for the top 25% of farmers enjoy a disproportionate share of the pie (70% in the EU and 90% in the US).

Recent case studies by the OECD have demonstrated that dynamic factors, such as avoidance of risk by farmers and the degree to which they expect policy changes in the future, exert a major impact on decisions about production levels. Using the knowledge obtained from these case studies, we plan to conduct analytical research on such dynamic factors so that we can identify the criteria for determining what really constitutes a decoupled policy. That should hopefully allow us to furnish information on, for example, the criteria for defining green box policies.

The Australian Government's Policy Approach to Agriculture

Don Banfield

Deputy Secretary, Department of Agriculture, Fisheries and Forestry, Australian Government
July 15, 2004

Australian agricultural policy has changed dramatically over the past twenty-five to thirty years.

The 1970s and 1980s were characterized by price intervention, input subsidies, the existence of a buffer stock system for such products as wool, and border measures such as tariffs. These were all designed to minimize the impact of price fluctuation on farmers.

The 1980s witnessed a major shift in policy. The government stopped intervening directly in the agricultural sector; instead, it adopted a mechanism that brought farmers face to face with price fluctuations and required them to make decisions for themselves in line with market signals. The government's role now is to help technology innovation, provide training support, and assist with research and development, all of which help farmers with decision making. Under the present system, direct government involvement is limited to highly exceptional circumstances, such as the provision of limited, short-term support in the aftermath of a major disaster.

In Australia, management of natural resources is an increasing concern. The country takes a phased approach, giving priority to fostering awareness of environmental issues among farmers. Water is a particularly precious resource, and properly managing it is a key issue. Excessive allocation of water resources to agriculture has had unfortunate consequences, which include not only waste of resources but also water pollution and aggravation of environmental problems. System reforms induce farmers to use water more efficiently and conserve it, since they now think of it as a purchasable commodity that costs money, and are therefore cost-conscious. By requiring farmers to think for themselves about how water resources are used, the reforms encourage them to seek the most efficient uses for their water.

Australia, too, is experiencing the rapid aging of its agricultural population. The problem of a graying population is extremely serious in rural areas. According to survey findings, while the problem is serious in sectors such as wool and wheat where productivity is poor, highly productive sectors such as vegetables and wine have seen an increase in younger farmers.

Work Programme of the OECD

Ken Ash

Deputy Director for Food, Agriculture and Fisheries, Organisation for Economic Cooperation and Development (OECD)
July 30, 2004

The following is a summary of the OECD's upcoming work programme.

First, we will monitor agricultural policy reform in different countries in monitoring reports, as well as conduct a quantitative evaluation (PSE). With respect to the food economy, we will analyze retail concentration and standards set by the private sector. We will also analyze the policies of non-member states, including Brazil, India, China, and South Africa.

Second, with respect to trade, the focus is on analysis of export competition policy. We plan to examine not only export subsidies, but also export credits, food aid, and state trading enterprises in exporting countries.

Third, there is the subject of the environment and sustainability. To date, collection of agri-environmental indicators and analysis of the relationship between production trade and the environment have been largely descriptive; we intend to turn out more analytical findings hereafter.

A cross-sectoral issue that we plan to examine is the question of how to select efficient, effective policies. To that end we will conduct a study based on market mechanisms.

As for the subject of the multifunctionality of agriculture, we have largely completed the job of economically analyzing this hitherto religious or philosophical concept and providing the international community with a clear framework for it. Next, we will turn to the question of the specific cases in which the provision of the multifunctionality by non-government organizations might be conceivable; we will also consider under what circumstances the performance of the multifunctionality might be encouraged by means of production-related policy measures.

Food safety has become a matter of great concern among member states; over the medium term, therefore, the OECD also intends to conduct economic analyses relating to food safety.

Promoting Structural Adjustment: The New Zealand Agriculture Experience

Murray Sherwin

Director General, New Zealand Ministry of Agriculture and Forestry

September 7, 2004

Agriculture in New Zealand is a key industry: it accounts for 20% of the GDP, and 90% of what it produces is exported. The agriculture and forestry sector as a whole accounts for 60% of the total value of the country's exports.

Until the 1960s, the government provided virtually no support to farmers, and agricultural products were exported to the UK. Then, in the 1970s, massive farm subsidies, including price supports and input subsidies, were instituted to cushion the shock caused by the UK's accession to the EEC, among other events. This policy of protecting agriculture had various adverse consequences: agricultural production strayed from market needs; farming expanded to land not suited to its purpose, thereby harming the environment; land prices crept up; and farmers lost their ability to innovate as they became more dependent on the government.

The Labour Party government elected in 1984 implemented extensive reforms. Price supports and subsidies were abolished. Tax concessions, and interest rate and landing concessions were withdrawn. Farmers assumed the cost of meat inspections and other types of health inspections, as well as of farmer advisory services and extension services.

Many of the functions performed by the Ministry of Agriculture and Forestry were phased out or privatized, and its staff was slashed from 7,500 to less than 1,000. Today its chief functions are conducting trade negotiations, setting standards and guidelines (on SPS and food safety), and protecting resources and the environment. Quarantine inspection of imported and domestic farm products is considered a key function of the government.

The reforms led to a reallocation of resources among agricultural sectors. Sheep farming, being of low profitability, experienced a precipitous decline, from seventy million to forty million animals. Relatively profitable sectors such as dairy farming and horticulture expanded.

Voluntary reforms were carried out in the conviction that abolishing regulations is good for the economy. The reforms taught several lessons: intervention is more difficult to stop than start; reforms require sustained, vigorous political support; and it is crucial that they be broadly implemented throughout the economy.

Consumer Perceptions and Attitudes towards Different Food Risks: A European Perspective

Lynn Frewer

Professor of Wageningen University, Netherlands

February 1, 2005

Consumers' perceptions of food risks determine their attitudes and behavior. Individuals differ in their level of anxiety, and perceptions of risk and convenience vary from country to country and from culture to culture.

The WHO's risk analysis framework is a useful tool for examining the relationship between consumers' perceptions of risk and their level of trust. This framework consists of three elements: risk assessment (technical evaluation of risk), risk management (political decisions relating to risk), and risk communication (discussion among stakeholders). Recently, consumers for their part have gained access to a vast range of information over the Internet, and they no longer depend solely on the decisions of experts; moreover, risk is amplified in society.

What, then, is the relationship between transparency of risk analysis and level of trust? As transparency increases and more information is made available, the general public comes to feel that risk management lies outside its control. Hence, further communication becomes necessary, and deeper involvement is required on the part of stakeholders. It is not necessarily the case, therefore, that greater transparency translates into greater trust; but there is no doubt, conversely, that a low level of transparency leads to loss of trust.

As an example of approaches to public communication and regulation in the area of food safety, let us examine the case of BSE in the UK. The British government's failure to recognize, until 1996, the possibility that BSE might cause vCJD fueled consumer fears. BSE was a danger that lay outside consumers' control, and their perception of the risk it posed was greatly affected by the

failure to provide them with proper information and the tone of the media's coverage.

Currently, we are constructing a model on nurturing consumer trust in food safety. We are beginning to understand what factors sway consumers' behavioral decisions, and how those factors interrelate.

Finally, when food safety is examined from the perspective of the natural sciences, considerable uncertainties are found, such as contamination by microbes, as products make their way from the retailer to the consumer along the food chain leading from the farm to the table. When food safety is examined from the perspective of the social sciences, consumers are observed to consume food products upon learning the risks, having obtained information on, for example, what uncertainties exist. Thus, at the consumer stage, the natural and social sciences overlap; research on food safety therefore needs to integrate both disciplines. In other words, in dealing with fears about food safety, it is important to engage in a dialogue with consumers during the process of risk analysis, while keeping that analysis firmly rooted in scientific research on bacterial contamination and toxicity.

The Multiple Roles of Agriculture in Development

Randy Stringer, Service Chief, and Takumi Sakuyama, Economist

Comparative Agricultural Development Analysis Service, Agricultural and Economic Development Analysis Division, Economic and Social Department, Food and Agricultural Organization of the United Nations
February 21, 2005

Since 2000, the FAO has, with funding from the Japanese government, been implementing an analytical project. This project is designed to throw light on the wide range of non-economic roles that agriculture performs in developing countries, and thus ensure that those roles are factored into policymaking. The non-economic roles that the project examines encompass not only externalities on the production front, but also externalities on the consumption front that accompany expansion in agricultural production, namely, poverty reduction and achievement of food security. The analysis of this indirect ripple effect is among the project's most distinctive features.

During Phase I (2000-2003), the project focused on eleven countries in Asia (China, India, and Indonesia), Africa (Ethiopia, Ghana, Mali, Morocco, and South Africa), and Central and South America (Chile, the Dominican Republic, and Mexico). With the cooperation of research institutions in each of these countries, we conducted fact-finding and performed quantitative assessments on individual functions in seven subject areas: (1) factors affecting agriculture's roles; (2) agriculture's environmental externalities; (3) the functions of agricultural development in reducing poverty; (4) the functions of agricultural development in ensuring food security; (5) the functions of agriculture in relieving population concentration in cities; (6) the functions of agriculture in cushioning employment; and (7) the cultural functions of agriculture.

Phase II (2004-2006), now in progress, involves performing analytical work based on the facts gathered during Phase I about the diverse roles that agriculture performs in developing countries. The goal is to formulate policy recommendations in three areas: (1) poverty reduction and food security; (2) agriculture's environmental externalities; and (3) revitalization of agricultural communities. The analysis of environmental externalities is designed to provide guidance on the adoption of environmental incentives in developing countries as a means of internalizing both the positive and negative externalities that agriculture possesses. The results will be brought together in reviews of the literature, individual case studies, and meetings of experts.