

Research Exchanges

Research Cooperation

Joint Seminar 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 1st Seminar was held in Seoul, Korea on Oct. 28, 2003.

1. Topic: Agricultural Cooperation in the Northeast Asian Countries: Opportunities and Prospects

2. Description of Seminar

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

Session 1: Current Situations and Prospects of Agricultural and Agricultural Trade Structure in Northeast Asia

Session 2: Northeast Asia's Agricultural Prospects under WTO, Doha Development Agenda

Session 3: Lessons for Strengthening Agricultural Policy Research Cooperation in Northeast Asia

3. Participants

Japan	Takano Toshiyuki: Japanese ambassador to Korea (only in ceremony)	
	Nishio Takeshi: President of PRIMAFF	and 5 persons
China	Qian Keming: President of IAE/CAAS	and 10 persons
Korea	Kim Joo-su: Deputy Minister of Ministry of Agriculture & Forestry of Korea (only in ceremony)	
	Lee Jung-Hwan: President of KREI	
	Ryo Kyeong-sang: Executive Vice-President of National Agricultural Cooperative Federation	
	Lee Young-Suk: Professor of Korea National Agricultural College	and 110 persons
		Total: about 130 persons

Note: Plans for future seminars

2004 2nd in China (Beijing)

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) Overseas Activities

Public Awareness of Food Security

Kenji YOSHINAGA

Director, Land and Water Development and Management Division, FAO

FAO, like other UN organizations, has suffered from a substantial reduction of contributions to the budget by Member countries. In this biennium, the budget has been reduced by 6.4% for the organization as a whole, which was passed on as a 9% reduction in my Division on Land and Water Development and Management. This has seriously affected staff and non-staff resources, in abolishing some existing posts and downgrading other posts. I now have my first experience of negotiating staff resources reduction in my career. This reduction comes partly from the increment of budget caused by unbalanced exchange rate of US Dollar and Euro (weak Dollar against the Euro), but the main reason stemmed from peer review of contributions to UN organizations in the light of the Member country's tight economy, including Japan. This trend will continue in the future, together with less investment and finance in the agricultural sector both in national and international levels.

The only way we can counteract this situation is to further pursue efficiencies by avoiding any unnecessary expenditure, overlapping of work, and so-called X-efficiency. At the same time, however, we should bring the public to recognize the fact that the food security issue is not a matter for negotiation, but a basic right of access for everyone. Public awareness of the importance of food security is the only way to potentially reverse the unfavourable trend of diminished investment in the agricultural sector.

Exciting Work in Paris

Ryuichi FUKUDA

Trade and Market Division, Directorate for Food, Agriculture and Fisheries, OECD

I worked at OECD (Organisation for Economic and Cooperation and Development) in Paris as an administrator in 2003. I engaged in maintaining the Japanese module of AGLINK at the directorate for agriculture, and improving its feed demand module. AGLINK, which was developed by OECD, is an econometrical model which is capable of analyzing the midterm agricultural commodities market and international trade of OECD member and non-member countries.

When I arrived at Paris in January 2003, it was very cold there. However, all my colleagues were hot on finalizing "OECD Agricultural Outlook," which regularly reports the outlook of the worldwide agricultural market and trade based on AGLINK analysis. In general, there are some difficulties for manipulating such a large econometrical model like AGLINK. We had indeed two problems in AGLINK for 2004. One was that we had to collect some macroeconomic indicators for extended projection periods. The other was adapting AGLINK for the enlargement of the European Union in 2004. These problems forced us to hold two hour meetings every week just before the deadline.

Though I cannot describe all of my experiences at OECD, everything was very interesting and exciting. I believe that what I acquired in OECD will help my work in PRIMAFF. I would like to thank all my kind colleagues in Paris.

2) Visiting Researcher



Gyunghee YOU*

(Rural Economies Section, Department of Rural Development

Policy: January 1, 2001 - December 31, 2003)

I published a research paper entitled *Groping for New Rural Agricultural Policy* in the summer 2003 issue (Vol. 6) of FARP Research, published by the Center for food, Agricultural and Policy Research (FARP) in Korea.

This paper is a case analysis of the process of policy formulation targeting the rural areas of Hokkaido, where unique independent agricultural policies are being implemented. The major characteristics of policies in this region are given below.

First of all, detailed statistical analyses were conducted by full-time researchers and the various problems in regional agriculture were clarified.

Next, information was promptly fed back to producers based on the results, and the views of the producers were integrated while the independent organization of the producers was promoted.

Finally, agricultural organizations, working hand in hand, actively incorporated the views of the producers and success was achieved in the independent formulation of policies.

In this study, I was able to propose a direction for an approach to new agricultural policies taking the above analysis into account.

In addition, I participated in a study session sponsored by the Korea Animal Improvement Association in Korea on December 11, 2003, and gave a talk entitled *The Current State of Japanese Black Cattle Improvement in Japan*.

In my talk, I pointed out the characteristics and issues thus far relating to the improvement of Japanese black cattle in Japan and offered a direction for the improvement of livestock in Korea.

* Japan Society for the Promotion of Science (Domestic Research Fellowship)



SHUANG XI*

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

The increases in farmer incomes and environmental conservation are the biggest concerns in Northern China. Accordingly, how to balance the increases in farmer income with the protection of the environment is an immediate research subject for Northern China.

In terms of this research subject, I have published the following papers.

- 1) Regional overgrazing in Inner Mongolia and Mongolia: Results of household surveys (March, 2004) (Japanese)
- 2) Food production under the environmental constraints in China, *Agricultural Problems in Major Countries Under the Environment and Resources Constraints, Research Paper of World Food Projection Project 4*, PRIMAFF (March, 2004) (Japanese)
- 3) Cashmere production and environmental problems of grasslands in the western region of Inner Mongolia, China (September, 2003) (Japanese)
- 4) The over-raising problem of the grassland sheep industry in Inner Mongolia Autonomous region in China and it's a strategy for its resolution (September, 2002) (Japanese)

- 5) *Grassland Desertification in Inner Mongolia: Problems, Trends and Solutions*, China, Inner Mongolia University publisher: 417p. (December, 2002) (Chinese and Japanese)
- 6) Overgrazing and desertification problems under the market economy in Inner Mongolia (December, 2002) (Japanese)

* Japan Society for the Promotion of Science (Domestic Research Fellowship)



Wyatt THOMPSON*

(International Affairs Section, Department of International Policy;
July 1, 2002 - December 31, 2003)

The interaction of volatility in agricultural commodity markets and agricultural policy are complicated and go in both directions. One of my objectives during my time at PRIMAFF was to introduce volatility caused by yield and macroeconomic fluctuations to a partial equilibrium model of world agricultural markets. During 2003, this objective was achieved.

Some of the initial work, relating to variability in yields, has been submitted to an academic journal. Examples of the interaction between volatility and policy have been given in the PRIMAFF research review (no. 11, March 2004) and in two publications of the OECD's Agricultural Outlook (2002 and 2003). The former note discusses Japan's calf deficiency payment scheme. The latter exercises focus on the US marketing loan rate for soybeans and the European Union intervention price for cereals. In each case, the policies' effects on the market can vary from almost nothing, in the case of high market prices that do not trigger automatic responses, to playing a determining role, as when low prices trigger these policies' power to disconnect producers' incentives from market forces.

Another objective of my assignment at PRIMAFF was to appreciate even more Japanese culture, agriculture and political decision-making. This goal was also met – thanks in large part to the assistance and support of many researchers at PRIMAFF.

*Japan Society for the Promotion of Science Fellowship; seconded from the Organization for Economic Co-operation and Development



Yasutomo KOJIMA*

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

Yasutomo Kojima, with the support of PRIMAFF, was awarded a JSPS Fellowship to undertake a research project focusing on price transmission in the Japanese food industry. This research suggests the following policy implication.

The GATT and CAP reform have attempted to shift the emphasis of agricultural policy away from market price support to direct income support for farmers since the early 1990s. On the surface, it might be expected that the benefits from falling market price of raw materials be brought about for consumers through a fall in the retail prices of the food. However, corporate behavior in the food system plays an important role in the allocation of the benefits, such as raw material cost reduction due to agricultural policy reform.

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

3) Overseas Education

Study in Wageningen (the Netherlands)

Kyoko SATO

Food Safety masters programme, Wageningen University

I have been studying in Wageningen University in the Netherlands since September 2003. I major in Food Safety in a masters programme, a very new programme which started last year. Wageningen University is famous for its multidisciplinary and practical science programmes. Reflecting those characteristics, the programme is constituted not only of natural but also social sciences, such as food law in the EU and social psychology of consumer behavior, and mainly discusses how problems in the real world were addressed. Few universities in the world have such a programme.

Lectures are given by several instructors, including guest officials from the central government of the Netherlands. In addition, every programme lecture is evaluated by students when it is completed. This system pushes instructors to improve their lectures to make them more attractive than before, and keep them in the state-of-the-art, which differs from Japan.

The masters programmes have another unique feature: an internship system which is becoming popular in Japan now. This historical system, whose purpose is to give students experience in society, is a compulsory part of the programme.

In everyday life, the bicycle is the most important transportation tool, as I expected. Riding a bicycle is convenient and faster than driving a car from my dormitory to the university, because there are wide roads for bicycles only and just ten traffic lights. Second-hand bicycles are commonly used here to avoid robbery.

Wageningen is a small town whose population is 35,000 and surrounded by deep forest. I enjoy the unique programme and ideal atmosphere.



Keukenhof : Famous tulip garden opening only in two months, or around April. Bulbs of tulips kept in cool temperature are transplanted continuously to keep blooming.

Study All the Time at Cornell University

Kentaro KATSUMATA

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

Attending classes from early morning to evening, then reviewing and preparing classes, working on a pile of homework, and studying for exams at the libraries until midnight! This is my daily life during semesters at Cornell University in Ithaca, New York. I am currently a master student of the Department of Applied Economics and Management at Cornell University, sent from PRIMAFF. My objective is to master the analysis methods of economics in order to improve the agricultural policies in Japan in the near future. Cornell University was founded in 1865, and has flourished as a member of the Ivy League. Cornell University has a lovely and inviting campus, with a mixture of old and new architecture, shaded arcadian walkways, and a panoramic view of Cayuga Lake. Cornell University provides the optimum environment for study and research in the following points which are common among leading universities in the United States. (1) Faculty members impose a large amount of studying stuff on students. (2) Faculty members must have office hours for students to talk about their research or study. (3) Libraries have huge numbers of books. In addition it has developed a close network among other university libraries, and a wide and solid searching database for journal articles. (4) Students have no choice but to study because Ithaca is a very quiet place without disturbing noise from downtown areas.



The oldest library at Cornell University.

Attendance at International Conferences and Researches Abroad, etc.

Affiliation / Name	Function	Place of Assignment	Period of Assignment
Director General			
Takashi Shinohara	World Agricultural Forum, ERA, IFPRI, WWI, EPI	USA	18th May 2003 - 25th May 2003
Takashi Shinohara	Attendance at World Agricultural Economic Research Institute Directors' Meeting	South Africa	13th August 2003 - 18th August 2003
Takeshi Nishio	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	Korea	27th October 2003 - 30th October 2003
Senior Researcher			
Shoichiro Kawahara	Project for exchanges with the Central Party School of the Chinese Communist Party in FY2003	China	7th September 2003 - 14th September 2003
Shoichiro Kawahara	Survey of food systems in China in preparation for emergency conditions relating to food safety	China	7th March 2004 - 14th March 2004
Policy Research Coordinator			
Masami Mizuno	Research and on-site survey relating to the approach to cooperation for the improvement of rural life	Cambodia	1st December 2003 - 11th December 2003
Ryohei Kada	3rd Korea-Japan Agriculture Management and Informationization Forum	Korea	24th June 2003 - 28th June 2003
Tetsuya Nakata	Assigned as agricultural function specialist	Myanmar, Brunei	28th May 2003 - 5th June 2003
Department of Food Policy and Evaluation			
Mitsuyasu Yabe	Assigned as agricultural function specialist	Malaysia	23rd June 2003 - 27th June 2003
Mitsuyasu Yabe	Multifunctional experts	Vietnam, Philippine	16th October 2003 - 28th October 2003
Mitsuyasu Yabe	Multifunctional experts	Philippine	9th November 2003 - 12th November 2003
Toshitaka Katsuki	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	Korea	27th October 2003 - 31st October 2003
Shunji Oniki	International Conference of Agricultural Economists	South Africa	15th August 2003 - 24th August 2003
Shunji Oniki	Survey of overgrazing and grassland desertification on the Mongolian Plateau	Mongolia	6th September 2003 - 24th September 2003
Shunji Oniki	Econometric research in overgrazing and grassland desertification on the Mongolian Plateau	China	15th March 2004 - 24th March 2004

Affiliation / Name	Function	Place of Assignment	Period of Assignment
Tomoko Ichida	Survey of policies for rural development and the agro-environment in Germany and the Netherlands and survey of beef and dairy traceability in Germany	Netherlands, Germany	12th October 2003 - 16th November 2003
Junko Kinoshita	International Consortium on Agricultural Biotechnology Research	Italy	28th June 2003 - 6th July 2003
Shigenori Kobayashi	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	Korea	27th October 2003 - 30th October 2003
Department of Rural Development Policy			
Tomoaki Ono	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	Korea	27th October 2003 - 30th October 2003
Hitomi Nakamichi	Survey of rural community residents in Sweden after EU membership and the European Society for Rural Sociology	Ireland, Sweden	16th August 2003 - 16th September 2003
Osamu Chiba	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	Korea	27th October 2003 - 30th October 2003
Department of International Policy			
Motoyuki Goda	Quantitative survey research relating to agricultural multifunctionality and dissemination projects	Thiland, Laos	9th March 2004 - 21st March 2004
Ryuichi Fukuda	OECD PEM experts' meeting	France	21st March 2004 - 25th March 2004
Atsuyuki Uebayashi	OECD AGLINK meeting, Italian on-site survey of the rice economy, EU	France, Italy, Belgium	1st June 2003 - 18th June 2003
Atsuyuki Uebayashi	Participation in the 1st Joint Study Working Group of the Australia-Japan Trade and Economic Framework Joint Consultative Committee	Australia	28th February 2004 - 6th March 2004
Masashi Tachikawa	Survey of regulations governing GM agricultural products in Europe	UK, Belgium	8th December 2003 - 18th December 2003
Yoshihisa Aita	Joint Seminar by agricultural policy research institutes of Japan, China and Korea	Korea	27th October 2003 - 31st October 2003

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 policy. During fiscal 2003, scholars and men of experience were invited to deliver lecture, which were as follows:

- 22nd April 2003
“SCIENCE: The Foundation of Agriculture”
Reported by Dr. Joseph J. Jen (Under Secretary for Research, Education, and Economics; USDA)
- 22nd May 2003
“Food Security of Farm in Mozambique”
Reported by Kouichi Ikegami (Professor, Kinki University)
- 30th June 2003
“Developments of Dutch Manure Policy”
Reported by Eiichiro Nishizawa (Assistant professor, Hosei University)
- 10th July 2003
“Labelling origin of marine products as an example of population analysis on the Japanese sandfish”
Reported by Takashi Yanagimoto (Researcher, Hokkaido National Fisheries Research Institute)
- 1st August 2003
“The participating style of rural development; Learning a lesson from the project of the irrigation in Gal Oya”
Reported by Dr. Norman Uphoff (Director IIFAD, Cornell University)
- 25th September 2003
“Reconsidering agriculture from Japan, Garden city nation”
Reported by Eiichi Tsutaya (Executive Director Norinchukin Research Institute Co., Ltd.)
- 10th October 2003
“The circumstances on organic agricultural products in the United States and Europe”
Reported by Toshio Oyama (Agricultural Policy Research Committee Inc.)
- 11th November 2003
“Asian rice farming is standing at the turning-point”
Reported by Shoichi Ito, Ph.D (Professor, Tottori University)
- 20th November 2003
“The state of China agriculture and the issue of safety of imported agricultural products”
Reported by Kazutsugu Oshima (Assistant Professor, Tokyo University of Agriculture)
- 19th December 2003
“The Aim and Future of the Marine-frontier Project in HAKODATE”
Reported by Nariharu Yamashita (Assistant Professor, Hokkaido graduate school)
- 22nd March 2004
“The present situation of tuna resources”
Reported by Yuji Uozumi (Director of Western Pacific Tuna and Skipjack Resource Division, National Research institute of Far Seas Fisheries)

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

2) Summary of the Research Conference

Summary of the research conference with guests from foreign countries

Combining Agricultural Trade Policy Reform with Rural Development Investment: How to Make it Work

J. von Braun

Director General of International Food Policy Research Institute

3rd July 2003

A recent study of IFPRI on forecasting the 2020 world food supply-demand situation shows that almost all increase in food demand will take place in the developing countries with their importation of food grain being doubled. Risks involved in such an analysis include inappropriate use of agricultural resources, unsecured food safety, a decline in food supply, and crises of governance and policy concerning food supply. Experience shows that public expenditure in agricultural research in Sub-Saharan Africa recorded an increase of 1.7% per annum during 1971-81, however it decreased to an annual 0.5% in the five years from 1991. Thus research that benefits small-scale farm producers is highly necessary in order to diversify the bases of their economic opportunities. It is also necessary to make market mechanisms functioning in the world commodity markets. OECD member countries are required to make reforms in their trade policies that are under the talks of the current WTO negotiation. The trade barriers consist of visible and invisible components. The biggest in the OECD countries is the huge agricultural subsidies, and it is in this field that agricultural policy reforms are required.

System of Rice Intensification (SRI): Characteristics and Development

Norman Uphoff

Director of Cornell International Institute for Food, Agriculture and Development

2nd August 2003

The System of Rice Intensification (SRI) is an intensive method of wet rice agriculture that has been developed by a French priest and farmers under his technical guidance in Madagascar during the 1970s and 80s. The main characteristics of SRI can be summarized as the following seven points: transplanting young seedlings (normally 8-day old seedlings are used); one seedling per hill; wider spacing between seedlings (at the minimum 25 cm or more) and straight row planting; frequent weeding (two times at the minimum); use of rotary weeder to aerate the soil; alternate wetting and drying of the fields; and use of compost as fertilizer. These SRI practices, when totally applied, are reportedly able to produce as high as 12 ton/ha of paddy per crop by farmers in various parts of the Asian and African countryside. Possible reasons for such an extremely high yield may be found in the large development of root systems and the increased level of bacterial activities, but research is yet to be made to give sufficient scientific explanation for this high-yielding nature of SRI rice cultivation. With wider space transplantation a rice plant has as many as 50 or more tillers in accordance with the model developed by T. Katayama in the 1930s. Thus there are yet high expectations for Japan's contribution in this field of future rice research.

Agricultural Trade Policies in China after Joining WTO

(Special seminar on FTA PROJECT)

Zhong Tang

Professor of Renmin University of China

11th September 2003

As the world's largest agricultural country and a top producer of agricultural commodities, China is not rich in natural resources, especially cropland and water. But her economy continues to develop. The annual growth of the GDP was 4.9% in 1970-78, and 8.2% in 1996-2000. The GDP per capita was 925 US dollars in 2001, while 63% of its 1,280 million people are still rural. Agricultural

production is not so prospective with the condition that agricultural land per capita is 0.12 ha – one seventh of the world average. And the ratio of agricultural products in total trade is only 5%.

Three main changes came from China's joining the WTO. Firstly, market access is now generally accelerated; secondly, Domestic support (AMS) is principally zero; and thirdly, all the subsidies for exports are removed. The average import tax in 2001 is 22%, but will go down to 17% in 2004. As such, China corresponds to the WTO regime most dramatically among developing countries.

Now use of agricultural land will become more free. Self sufficiency of food will be maintained at the level of 95%. As to food safety, the Bureau of National Food Safety is now functioning well. Although there are still some regulations like a strict rule for sale of cereals to the Bureau of Cereals and price regulations by local governments for wheat, rice and corn, there are many kinds of policies going on: direct payment policies that are now experimentally introduced, export promotion programs, and environmental policies for reforestation.

Compared to the past situation, the predominant Chinese position in terms of cereal production and other land-intensive crops is decreasing and a shift from food to feed import is taking place. It will take a long time to judge the impact on agriculture, but Chinese agriculture will become increasingly competitive in any case.

Production and Export of Vegetables in Korea – Trends and Background

Kang Kyoung-Koo

Faculty of Environmental Gardening, Minami Kyushu University

10th March 2004

As the import of fresh vegetables into Japan increased in volume by 60% between 1997 and 2000, imports of vegetables from Korea surged rapidly at a rate of 780%. Changes in agricultural policies in Korea, as well as changes in production and distribution, are among the background factors that can be cited.

During the two consecutive administrations of Presidents Kim Young-Sam and Kim Dae-Jung in Korea, policies were devised to promote the export of agricultural products while a number of investment and financing plans were implemented and the share of the budget for agriculture was broadly increased. This opened the way for producers to move ahead with the development of glazed hothouses and other facilities, while also promoting the enhancement of quality and the formation of major production areas. In terms of distribution, the development of local distribution centers for the consolidation, sorting and packaging of agricultural products is advancing, and shipments of standardized products have become well established. Furthermore, fresh fruit and vegetables exported from Korea are shipped from Pusan to Shimonoseki or Hakata by ferry, thereby eliminating the need to wait in line for port entry as in the case of cargo vessels. It has therefore become possible for agricultural products from Korea to reach store shelves in Japan within two or three days after harvest, much the same as products from remote areas of Japan.

Imports of fresh vegetables have increased rapidly against this backdrop, and viewed from a long-term perspective, this suggests that Japan will become a part of the Korean market and that the volume of imported fruits and vegetables from Korea will continue to increase steadily in the future.

Recent Trends in Agricultural Policies in Vietnam

Vo-tong Xuan

President, An Giang University, Vietnam

18th March 2004

Liberalization has been advancing in Vietnam due to the Doi Moi policies of the 1980s, and cultivation rights have been given to farmers, market economy elements have been introduced in agriculture, and agricultural technology has been improved. Vietnam has become one of the world's top rice exporting countries within a short time.

The need has recently risen for new policies capable of responding to the international trend toward lower rice prices and the diversification of agricultural production in order to improve farm income and efforts to connect agriculture and business are being made. The per capita income of paddy field rice growers in the Mekong Delta, an agricultural area, was about \$100 in 1988 and this

increased to about \$350 by 2003. Problems that burden agriculture in the Mekong Delta include the natural conditions of flooding during the rainy season and lack of water during the dry season, the considerable disparities in agricultural product quality, the high cost of production compared to Thailand, and the disadvantageous position of farmers in the sales market.

Necessary measures in the short term include the promotion of investment in the private sector and the restructuring of inefficient government-operated corporations. In the long term, there is a need for education for the farming people, more substantive agricultural cooperative activities and rural financing, establishment of processing facilities for agricultural products, direct market sales, and the establishment of farm operations based on the management of natural resources.

3) Summary of the Seminar

Summary of the Seminar by foreign countries

Choosing Policy Instruments for a Multifunctional Agriculture

Stefan Tangermann, Dr.

Director for Food, Agriculture and Fisheries, OECD

19th June 2003

Farm incomes and the multifunctional role of agriculture are two important policy targets for many OECD countries. Price and output related measures are major policy instruments in many countries. OECD can help Member countries to understand which policy instruments are more effective, efficient and equitable, while policy objectives should be well defined by each Member country.

With respect to multifunctional services that agriculture can provide, payments to farmers for the provisions of relevant services can do a better job in achieving policy objectives. As for flood prevention, for instance, a payment to paddy farmers just for the provision of relevant service is an appropriate policy instrument. In cases where the link between agriculture production and the relevant service is weak or non-existent, a payment to anybody providing the service may be an appropriate policy instrument. Output support may be good policy for multifunctionality, in exceptional cases provided that the link between agricultural production and multifunctional output is very strong, positive, direct, equal at all production levels, and equal in all locations, and transaction costs of targeted measures are very high. OECD continues to analyze these issues, including empirical research.

With respect to farm income policy, price and output supports are to be avoided because those measures are unnecessary (farm household incomes are not generally low), inequitable (larger farms receive most support), and inefficient (\$1 of extra price support adds only \$0.25 to farm income). On the other hand, policy measures targeted at income stabilization, technology improvement, social welfare and diversified income sources are more appropriate. For example, income insurance, technology extension service and social adjustment assistance may be chosen as such.

In conclusion, while agricultural policies identify multiple objectives, such as farm income and multifunctional services, in the majority of cases, targeted policies do the best job. However, farm supports in OECD countries are still dominated by output measures. Therefore, there is a lot of scope for making policies more effective and efficient.

Rising Temperatures, Falling Water Tables, and World Food Security

Lester Brown

President of the Earth Policy Institute

20th August 2003

I call the over-consumption of the earth's natural capital a "bubble economy". The most vulnerable where the bubble is most prominent is the food economy. Water tables are falling in China, India and the U.S. due to overpumping of aquifers. The water required to produce the grain imported last year into North Africa and the Middle East is equal to the annual flow of the Nile River. A new problem that farmers are facing is rising temperatures. I do not think we can imagine what the effect of this will be on world food production. We first experienced overplowing in the U.S. with the Dust Bowl in 1930s, and some 2 or 3 million people were displaced from the southern Great Plains and many of them moved to California. In China huge dust storms are now forming each spring and are evident in Japan both from overplowing and overgrazing. China is trying to stop the advancing deserts, but with not much success. Soybean is now consuming more and more land and putting a lot more pressure on the earth's agricultural land resources. It is becoming more difficult to raise grain yields. In the last four years the world grain harvest has fallen short of consumption. When China moves into the world market for massive imports of grain the wake-up call in the food front will take. Population, international effort to raise water productivity and stabilizing climate are three areas where we are going to have to move very quickly to minimize the scale of the potential food scarcity.

Changing Dimensions of the Food Economy - Future OECD Work

Look Boonekamp

Head of the Trade and Markets Division, OECD, Directorate for Agriculture

14th October 2003

In September 2001, The High-Level Meeting of the Committee for Agriculture of the OECD discussed the main orientation of the programme of work. At that time, the role of the food economy as well as the consideration of supply and demand change was emphasized. In February 2003, the Food Economy Conference was held, and the basic questions were posed as to the role for the OECD, in light of the supply side dynamics, and changes at the demand side of the food economy. For the supply side, concentration and consolidation have been taking place, which change the ways of doing business, i.e. strategic alliances, vertical coordination and integration, etc. Large supermarket chains, like Wall-mart in the USA, are becoming more and more dominant in the food retail market. If we look at the changes at the demand side, changes in lifestyles, demographics and incomes are taking place, and consumers are putting emphasis on the quality and safety of food. In such changing circumstances for food, we might put such questions: (1) Is the new food economy structure effective and efficient? (2) Are market forces in effect? (3) Is access guaranteed in its various dimensions? (4) Is there a relation between food economy changes and health/health care costs? Then, we might be able to call for the role for the OECD. We will study: (1) Market structure and competition policy; (2) Challenges and opportunities related to changing demands; and (3) Public and private-sector responses to changing consumer demands. We hope that our study can contribute to the analysis of the changing dimension for the food economy that we described above in a policy context.