

Publications and Summaries of Selected Research Papers

● Publications

PRIMAFF Review (Japanese)	No.16~19 quarterly
Journal of Agricultural Policy Research	No.9~10 published irregularly
Research Monograph Series (Japanese)	No.7 published irregularly
PRIMAFF Annual Report (Japanese, English)	No.4 annual

● Summaries of selected research papers

1) Norin Suisan Seisaku Kenkyu (Journal of Agricultural Policy Research)

“The Progress of the Rural Finance and the Character of Organization of Rural Credit Cooperatives in China” by Shoichiro KAWAHARA, *Journal of Agricultural Policy Research*, No.9, pp.1-32.

Although rural credit cooperatives in China are expected to play important roles as the basis of the rural finance, they cannot fulfill their function as expected and cannot transform themselves into organization of cooperative society.

In view of such circumstances, this paper will try to elucidate the character of organization of rural credit cooperatives in the light of the progress of the rural finance, and then will try to give some answers to the question of why rural credit cooperatives cannot transform themselves into organization of cooperative society.

Before Chinese Revolution, there also existed rural credit cooperatives in China, but they were very small in size and immature of credit organization.

In the period of the agricultural cooperation, rural credit cooperatives were established nationwide in China. At that time, a rural credit cooperative was formally established in each village, and was ruled by a village group as an organization owned by a village group.

In the period of the people's commune, rural credit cooperatives had double characters, one was a character of the basic organization of Bank of People, and the other was a character of the organization owned by a village group.

With the policy of Reform, Chinese government dissolved the double characters, but this caused village groups to interfere more intensively with rural credit cooperatives. And loans within the range of village groups, especially those to village-town enterprises, had remarkable bad influence to the management of rural credit cooperatives.

After the reform of the rural finance system in 1996, though the transformation into organization of cooperative society has been tried, rural credit cooperatives have not been able to free themselves from characters which were historically formed.

Mainly because of problems and restrictions which were formed in the history of rural credit cooperatives, they cannot transform themselves to organization of cooperative society. In these conditions, rural credit cooperatives are now obtaining a new character of organization and are stepping forward to regional banking facilities.

“Economic Experiments on Rice Production Rights Trading and Their Implications for Institutional Design” by Hiroki SASAKI, *Journal of Agricultural Policy Research*, No.9, pp.33-52.

This paper, based on experimental economics, studies institutional design for rice production rights trading since it has become a significant issue in Japanese agricultural economics. Specifically, following the methods used in studies on CO₂ emissions trading by Hizen and Saijo (2001) and Hizen et al. (2001), experiments under conditions modified to reflect the case of rice production rights trading are conducted.

Two main implications are obtained from the experiments. First, rice production rights trading will not lead to non-compliance, with respect to production controls. It is found that most participants uphold their production target level if there is a penalty for non-compliance. However, there is the possibility that aggressive trading will not occur due to prevalent fear of excess reduction in supply regions. To handle this problem, policymakers should consider the “banking system”. Banking, in this context, refers to a mechanism to carry-over excess reduction from one commitment period to the next.

Second, three institutions for trading are compared: bilateral trading, English auction, and double auction. In an English auction, starting from an initial price set by the auctioneer, bidders outbid each other until no bidder bids more than the current price, with the highest bidder taking the item.

On the other hand, in a double auction, all the participants can buy and sell. If price stability is used as a criterion of judgment, the experiments show that the double auction system is preferable. However, given the importance of widely distributed information for a double auction, it would be necessary to develop tools and facilities to provide quickly information about ask, bids, and contracted prices.

“Structural Change of World Beef Trade and Its Impact ; A Scenario Analysis by Using AGLINK model” by Atsuyuki UEBAYASHI, *Journal of Agricultural Policy Research*, No.9, pp.53-84.

The first case of BSE (Bovine Spongiform Encephalopathy) outbreak in North American countries, namely of Canada on 20 May 2003, and of USA on 23 December 2003, have been confirmed. Japan, the largest importer of US beef, and many other countries immediately set import ban on US beef. In Japanese beef market, USA was a very important supplier, which accounted for about 30 per cent of total beef supply. Therefore, the immediate ban on import brought substantial boost of beef price in Japan. Among all, the restaurant and eating-out industries are in difficulties, as they rely heavily on US beef for raw material.

For analysing the impact of the break of US beef export to the Pacific Beef Market that includes Japan, I carried out a scenario analysis by using AGLINK model, that is a global supply and demand model for agricultural products, which was developed by OECD (The Organisation of Economic Co-operation and Development), with the cooperation of its member countries.

I used the 2003 baseline model as benchmark, and modified it so that it could reflect the structural change in beef market after the breakout of BSE in Canada and USA. Then I run these two models and compared the generated results with the baseline towards 2008. I assumed that the beef export of Canada and USA to outside the NAFTA (the North American Free Trade Agreement) countries would totally stop in year 2004 and 2005.

According to this scenario analysis, in the years of beef export ban of Canada and USA (which are year 2004 and 2005), the international beef price would substantially rise, and other beef exporters, i.e., Australia and New Zealand would benefit substantially from the ban. On the other hand, US internal beef price would decrease by oversupply. The large importers like Japan and Korea, the demand for beef would decrease, due to the hike of beef price, and demand for pigmeat and chickenmeat would increase as a result of substitution effect. Beef producers of these importing countries would benefit from the hike of beef price, however, the responses to the market are diverse, i.e., some countries would increase slaughter of cows and increase supply of beef, but other countries would decrease slaughter and keep cows for more price increase in the future.

“Legal Contents and Applied Legal Principles of Rights to Undertake to Manage Farmlands in China” by Shoichiro KAWAHARA, *Journal of Agricultural Policy Research*, No.10, pp.1-32.

In China, as the basis of agricultural and village policies, rights to undertake to manage farmlands have played important roles since Reform and Open Policy began.

In relation to rights to undertake to manage farmlands, this paper at first arranged the process of changes of farmland undertaking system, then made clear the legal contents of rights to undertake to manage farmlands and elucidated the actually applied legal principle of such rights.

The legal contents of rights to undertake to manage farmlands are including two kinds of rights, one is “a right to undertake farmlands” as an individual from a village group, the other is “a right to use farmlands and to earn and so on” as a party of the undertaking contract, and “a right to undertake farmlands” as an individual is more essential.

Because Chinese land possession system is even at present based on the socialist land possession system affected by laws of Soviet Union, rights to undertake to manage farmlands are needed to be harmonized with the legal principles of the socialist land possession system. The legal principles actually applied to rights to undertake to manage farmlands are not the principle of free contracts between equal parties, and are ones of administrative managements of the village land system, which are mainly based on the principle of equality.

Though rights to undertake to manage farmlands are seen as property rights in a popular view in China, owing to restrictions originating in the land management system, the legal principle of property rights are little applied in practice.

“An analysis of the negotiation process of the United States and Australia Free Trade Agreement and estimation of its economic impact : focusing on agricultural issue” by Ryuichi FUKUDA, *Journal of Agricultural Policy Research*, No.10, pp.33-60.

This paper aims to analyze the negotiation of the United States and Australia Free Trade Agreement (UAFITA) and its potential impact on the economy estimated by GTAP (Global Trade Analysis Project) with focusing on the agricultural issues that made the negotiation more difficult. The main

results of the analysis are as follows. First, it is illustrated that the theoretical conditions of concluding negotiation for reducing tariffs between two countries. Though free trade is always satisfied with the Pareto optimum conditions, it is not necessary the theoretical result of the tariff negotiation. Second, keeping track of the negotiation process, we find that the agreement was accomplished by Australia's admitting some exceptions that include maintaining US sugar and dairy Tariff Rate Quota (TRQ). Third, we estimate impact of the UAFTA on the world economy and agricultural production and trade. We compare it with another estimation of impact caused by eliminating all tariffs between the US and Australia. The result shows that Australia's compromise certainly aggravates its welfare compared to the case of free trade. The bargaining theory suggests that Australia should draw more concession from the US. Australian sugar producer loses much potential benefit by maintaining US sugar TRQ.

2) Norin Suisan Seisaku Kenkyu Sosho (Research Monograph Series)

“GMOs: Globalizing Productions and Their Regulations”, edited by Norio FUJIOKA and Masashi TACHIKAWA, *Research Monograph Series*, No.7, 296 p.

The aim of this paper is to clearly understand the regulations concerning genetically modified organisms (GMO) as well as the present situation and prospects for production and distribution in major foreign countries.

Following an introduction outlining the world situation regarding GMO, GMO-related regulations and the trends in production and distribution in each major country are analyzed in Chapters 1 to 5.

In Chapter 1, we analyzed the situation in the United States, which has been the front runner in GMO research and production. Regulations on GMOs in the US are quite different from those in the EU in that they have been enforced by expanding the existing legal framework. Recently, however, the need for the review of the regulatory structure is discussed and we analyzed such issues. Also, we identified characteristics of GMO production and distribution system and recent changes in the international trade.

In Chapter 2, we analyzed the situation in the EU where, in contrast to the US, strict regulations are imposed on GMOs. In the EU, a new regulatory structure was established during the de facto moratorium that had existed since 1998. This chapter describes the outline and characteristics of such structure, particularly the structural characteristics of regulations introduced in 2004 concerning genetically modified food and feed, and labeling and traceability, roles of European Food Safety Authority, the move towards resumption of approval, and the situation concerning development of various related policies complementing new regulations.

In Chapter 3, we analyzed trends in Australia, which introduced successive new GMO-related regulations in recent years, and the problems it faces. As opposed to the federal government and those who are active in introducing GMOs, there exist producers and consumers who have strong concerns about GMOs. Such a dilemma is explained by taking up the example of “twist phenomenon” involving the federal and state governments concerning commercial cultivation of GM canola.

In Chapter 4, we analyzed the trends in Argentina and Brazil in South America, the next largest production area of GM crops after North America. We present a clear picture of GMO regulations, trends in production and trade, and future prospects, including the recent approval of commercial cultivation in Brazil, though with a time limit.

In Chapter 5, we analyzed trends in China. In addition to providing outline GMO regulations in China, we analyzed the friction between the US and China caused by import regulations. Also, mainly regarding Bt cotton whose planting is expanding, we identified characteristics of GMO production areas and trends in research and development.

Then in Chapter 6 and Chapter 7, we made an analysis from a perspective different from that of the trend analysis of each country described above.

In Chapter 6, we analyzed the significance of the concept of the precautionary principle, which is often referred to as the basis for strict regulations on GMOs, and its position in relation to international laws. We also identified the possibility of conflict between GMO control measures based on this principle and various rules of WTO Agreement based on the principle of free trade.

In Chapter 7, we analyzed consumers' awareness of GM foods. In the survey of consumers in the UK based on Latent Class model, high willingness to pay for non-GM eggs was observed among the “food and environmental group” and “GM unfaithful group”, while willingness to pay was very low among the “GM optimistic group”. This result clearly indicates that consumers are largely divided into 2 groups according to their GMO-avoidance behaviors.

Councilors and Research Staff Members

● Councilors (February 1, 2004 ~ January 31, 2006)

Name	Post
Lester R. Brown	President, Earth Policy Institute
Kenji Horiguchi	Dean and Professor of Agricultural Economics, School of Political Science and Economics, Waseda University
Kuniko Inoguchi	Professor of Political Science, Sophia University
Toshiko Kanda	General Secretary SHODANREN/CJ (SHODANREN/CJ is National Liaison committee of Consumer Organizations)
Heita Kawakatsu	Professor, International Research Centre for Japanese Studies
Ichiro Kitasato	President, Meiji Seika Kaisha, Ltd.
Soshichirou Nakagawa	Professor, Department of Environmental Policy and Management, Tottori University of Environmental Studies
Shin-Ichiro Nishimura	Professor, Graduate School of Science, Hokkaido University
Toshio Yamada	Senior Executive Director, Central Union of Agricultural Cooperatives
Kazuko Yamamoto	Journalist
Hiroshi Yoshikawa	Professor, Faculty of Economics, University of Tokyo

Director General

Takeshi Nishio

Deputy Director General

Shozo Yamamoto

Department of Research Planning and Coordination

Taiji Yoshida, Director

Masashi Tachikawa, Senior Researcher

Research Planning Division

Tomoaki Ono, Division Chief

Research Coordination Division

Yasutoshi Ideta, Division Chief

Research Information Technology Division

Sotaro Inoue, Division Chief

Policy Research Coordinator

Osamu Chiba

Policy Research Coordinator

Masato Ito

Policy Research Coordinator

Kiyofumi Ishihara

Policy Research Coordinator

Akihiko Udoguchi (Plural Posts; International Trade Policy Coordination Division, Minister's Secretariat)

Yukisato Yoshida, Senior Researcher

Policy Research Coordinator

Kenichi Atsuta

Assistant Policy Research Coordinator

Kazuyo Hirakata

Assistant Policy Research Coordinator

Koichi Sato

Assistant Policy Research Coordinator

Manabu Takeuchi

Assistant Policy Research Coordinator

Nobunori Kuga

Department of Food Policy and Evaluation

Tetsuro Yakushiji, Director

Policy Evaluation Section

Kunihisa Yoshii, Head

Kentaro Katsumata

Atsushi Tanaka

Environmental Evaluation Section

Motoyuki Goda, Head

Takashi Hayashi

Hiroki Sasaki (Plural Posts; Environmental Policy Division, Minister's Secretariat)

Supply and Demand Analysis Section

Junichi Ito, Head

Yuichiro Takahashi, Senior Researcher

Food Consumption Section

Tomoko Ichida, Head
Junko Kinoshita, Senior Researcher

Food System Section

Norio Fujioka, Head
Katsuya Takahashi, Senior Researcher
Tomoo Higuchi

Department of Rural Development Policy

Toshitaka Katsuki, Director

Agrarian Structure Section

Tsutomu Matsuhisa, Head
Gentaro Suzumura

Rural Society Section

Yoshihiko Aikawa, Head
Akira Egawa, Senior Researcher

Rural Economies Section

Shigenori Kobayashi, Head
Noboru Hashizume, Senior Researcher

Rural Resources Section

Kyoichiro Adachi, Head
Takeshi Fujie
Yoshifumi Takahashi

Department of International Policy

Yasuo Watanabe, Director

International Affairs Section

Shoichiro Kawahara, Head
Koichiro Akashi, Senior Researcher
Ryuichi Fukuda

Europe Section

Atsuyuki Uebayashi, Head
Fumiaki Suda, Senior Researcher
Kentaro Kawasaki

America and Oceania Section

Junichi Shimizu, Head
Tatsuji Koizumi, Senior Researcher

Asia and Africa Section

Yoshihisa Aita, Head
Takeshi Sakurai, Senior Researcher
Takashi Okae

Budget and the Number of Staff

● Budget

Budget for annual revenue for FY 2005:	¥2,7424,000
Budget for annual expenditure for FY 2005:	¥898,160,000
(details)	
Personnel expenditure:	¥700,397,000
Research expenditure (excludes Research project expenditure):	¥144,187,000
Research project expenditure:	¥53,576,000

● Number of staff (as of March 31, 2006)

Director General	1
Deputy Director General	1
Researchers (includes policy research coordinators and assistant policy research coordinators):	49
Administrative Officers	29
.....	
Total	80

(Note: Those who retired are included in the data above dated March 31, 2006.)

Library

● New Volumes of Acceptance (2005) (Volumes)

	Purchase	Donated	Total
Japanese books	710	1,196	1,906
Foreign books	223	568	791
Total	933	1,764	2,697

● Volumes of Library Holdings (as of March 31, 2006)

Japanese books	246,546 Volumes
Foreign books	51,944 Volumes
.....	
Total	295,793 Volumes