

2025 年度 国際シンポジウム

2025 International Symposium of the Association for Regional Agricultural and Forestry Economics

フードシステムの金融化：日本における概念の整理と研究課題の合意に向けて

日時： 2025 年 11 月 2 日(日) 午前 10 時から 12:30 時半

会場： 島根大学（対面） + Zoom ウェビナー（オンライン）

使用言語： 英語

Financialization of the Food System: Contextualization in Japan and Developing a Research Agenda

Date: Sunday, November 2, 2025 (JST=GMT+9)

Time: 10:00-12:30

Venue: Shimane University + Online (Zoom Webinar)

Language: English

Participation Fee: Free for online participation

Zoom URL

<https://ritsumeai-ac-jp.zoom.us/j/95157636305?pwd=GTssvpdiCeVNCyz9SnGqTq5nGREjg5.1>

Meeting ID: 951 5763 6305

Passcode: 110084

Chair: Assoc. Prof. FEUER Hart N. (Kyoto University)

Moderators: Assoc. Prof. TAKASHINO Nina (Ritsumeikan University)

Senior Lecturer KUSADOKORO Motoi (Tokyo Univ. of Agriculture & Technology)

Concept of the Symposium

The financialization of food systems has become a defining force reshaping global agricultural production, distribution, and consumption. Beyond the broad notion of financial actors gaining influence in commodity markets, food system financialization refers to the transformation of food into a financial asset, where speculation, rent-seeking, and financial engineering shape prices, market structures, and food security outcomes. This process manifests in several ways, including speculative trading in agricultural futures and derivatives, the increasing role of institutional investors and private equity in farmland and agribusiness, and the financial restructuring of major commodity traders.

The consequences of food financialization are far-reaching. They include heightened price volatility, opaque supply chain governance, market concentration in the hands of a few multinational traders, and growing disconnections between producers and consumers. These dynamics exacerbate food insecurity, marginalize small-scale farmers, and shift the priorities of food systems away from public

goods and sustainability toward financial returns. While these issues have been extensively studied in North American and European contexts, their manifestations and impacts in Japan remain underexplored.

Notably, Japan has a unique historical relationship with food financialization, having pioneered one of the world's first formalized agricultural futures markets with the Dojima Rice Exchange in Osaka during the 18th century. However, contemporary financialization in Japan's food sector has received little scholarly attention, despite its significance in shaping domestic and international agricultural markets. Japan's role as a major importer, its evolving agrarian policies, and the financial strategies of its food corporations provide rich ground for analysis.

This symposium brings together international and Japanese scholars to critically engage with the evolving landscape of food system financialization. Key themes include: Speculation and Price Volatility (financial instruments), Market Concentration and Corporate Power, Financialization of Land and Production, and Regulation, Policy, and Alternative Models.

By situating Japan within global debates on food financialization, this symposium aims to advance theoretical frameworks, generate new empirical insights, and foster dialogue on policy alternatives. In doing so, it seeks to contribute to both academic discourse and practical responses to the challenges posed by financialization in food systems.

Program

10:00-10:05 Welcome Address: TAKETOSHI Kazuki
President of ARAFE

10:05-10:10 Opening Remarks:

Assoc. Prof. Hart N. FEUER (Kyoto University)

10:10-10:35 Presentation 1: Price fixing by dominant meat processors and the global concentration of agrifood power

Prof. Philip H. HOWARD (Michigan State University)

10:35-11:00 Presentation 2: The Backstage and Frontstage of Public Firms in the Global Agrochemical Complex

Prof. Loka ASHWOOD (University of Kentucky)

11:00-11:25 Presentation 3: Rice as Financialized Food in the Japanese Empire

Assoc. Prof. MAEDA Kiyotaka (Keio University)

11:25-11:35 Short Q&A and Transition Time

11:35-12:00 Comments by Dr. HIRAGA Midori (Kyoto Tachibana University), YAGI Kohei (Kobe University)

12:00-12:25 Public Discussion

12:25-12:30 Closing Remarks: Dr. MAHARJAN Keshav Lall (Vice President of ARAFE)

Symposium Coordinators:

Executive Board Members for Internationalization of the Association for Regional Agricultural and Forestry Economics

日本語版

シンポジウムの趣旨

フードシステムの金融化は、世界の農業生産、分配、消費の構造を根本的に変化させている。フードシステムの金融化は、商品市場における金融機関や投資家の影響力の拡大のみならず、食料が金融資産へと転換される過程を指し、投機、レントシーキング、金融工学による価格形成、市場構造、食料安全保障のあり方を規定する。このプロセスは、農産物先物・デリバティブ市場における投機的取引の増加、機関投資家や投資ファンドの農地、アグリビジネスへの関与の拡大、主要商品取引業者の金融的再編など、様々な形で現れている。

フードシステムの金融化がもたらす影響は極めて広範囲にわたり、極端な価格変動、不透明な市場支配、少数の多国籍トレーダーへの市場集中、そして生産者・消費者間の距離の拡大が生じている。これらの結果、食料不安が悪化し、小規模農家が周縁化されている。フードシステムは、公共財である食料の持続的供給を担ってきたが、金融化はフードシステムを金融的利益の追求に転換させている。こうした問題は、北米や欧州において広く研究されてきたが、日本における具体的な展開や影響は十分に検討されていない。

日本は食料システムの金融化に関して独自の歴史を持つ。大阪の堂島米市場が18世紀に世界初の制度化された農産物先物市場の一つとして成立したことは、その先駆性を示している。しかし、近年の日本における食料分野の金融化に関する研究は限られており、国内外の農産物市場における重要性に対して十分な分析が行われていない。日本は主要な食料輸入国であり、その農業政策の変遷や食料関連企業の金融戦略は、研究対象として極めて重要な意義を持つ。

本シンポジウムでは、海外および日本の研究者を招き、フードシステムの金融化に関する最新の動向を批判的に検討する。主要なテーマは以下の通りである：

- **投機と価格変動**（食料の金融商品化と市場の変動）
- **市場集中と企業支配力**（食料貿易と供給の寡占化）
- **農地と生産の金融化**（農地買収とアグリビジネスの再編）
- **規制・政策・代替モデル**（金融化が進行する市場への政策対応と持続可能なシステムの探求）

本シンポジウムは、日本をグローバルなフードシステムの金融化の議論の中に位置付け、理論的枠組みの発展、新たな実証的知見の創出、代替的政策に関する議論を促進させるこ

とを目的としている。学術的な貢献のみならず、フードシステムの金融化により生じた課題解決に向けた政策形成にも寄与することが期待される。

Presentation Content

Presentation 1: Price fixing by dominant meat processors and the global concentration of agrifood power

Dr. Philip H. Howard (Michigan State University)

Abstract:

In recent years, the prices for chicken, pork and beef in the United States have increased rapidly, even as the prices paid to livestock producers have decreased. This has led to record profits for many of the world's largest meat processors, due to their strategic position between more diffuse producers and consumers.

A key contributor to this trend was Agri Stats, Inc., a firm that coordinated the sharing of competitively sensitive data between meat processors—ostensibly anonymously, but in practice allowing for the easy identification of firms, and even specific facilities. This enabled participating firms to better coordinate their decisions to achieve (1) lower production levels, (2) higher retail prices, and (3) lower wages for workers in their processing plants. Hundreds of lawsuits alleging these actions have resulted in more than a billion US dollars in fines and settlements to date.

In addition to data sharing, other changes that are blurring the boundaries between dominant meat processing firms include common ownership and “gin rummy” transactions. Common ownership occurs when a few investment firms, such as Vanguard and BlackRock, hold large ownership stakes across the industry's largest firms—this could increase incentives for anti-competitive behaviors, such as increasing prices. “Gin rummy” refers to swapping divisions among the largest firms with a goal of obtaining even greater power (including over pricing) in more specific markets.

In the US, just four firms control well over 70% of beef processing, more than two-thirds of pork processing and more than half of chicken processing. The largest firms, JBS and Tyson, are dominant in all three categories. These levels of concentration could easily lead to higher prices simply through price signaling, but the industry changes described above further increase the potential for price fixing.

These trends are also occurring globally, as well as in other agrifood industries. Meat processing firms in Brazil and China, for example, have dramatically increased their market shares through government-backed acquisitions of competitors—what were once hundreds of separate firms have been folded into JBS, Marfrig, Brasil Foods, Minerva and WH Group in the last 25 years. Grain trading, seeds, pesticides, fertilizers, dairy processing, and beer brewing are among sectors of the food system that have become much more concentrated, and therefore more susceptible to price fixing, in recent decades.

Competition laws at national levels have failed to halt agrifood consolidation and its negative impacts. Some steps to better protect consumers, producers and workers might include, (1) dismantling government subsidies to dominant firms, (2) developing global competition treaties, and (3) increasing public awareness of these problems.

Biography:

Philip H. Howard is a Professor in the Department of Community Sustainability at Michigan State University, USA and a member of the International Panel of Experts on Sustainable Food Systems (iPES-Food). He has analyzed and visualized increasing consolidation in numerous industries, including processed organic foods, beer, wine, soft drinks, meat, dairy, commercial seeds, distribution and retailing. He conducted research at the Center for Agroecology and Sustainable Food Systems at the University of California, Santa Cruz from 2002 to 2006, was a visiting scholar at the University of Utah in 2013-2014, and a visiting research fellow at Lund University in Sweden in 2021. Phil was president of the Agriculture, Food and Human Values Society from 2015 to 2016. He is the author of *Concentration and Power in the Food System: Who Controls What We Eat?* (2016, 2021 Bloomsbury Academic), and holds a PhD in Rural Sociology from the University of Missouri.

Presentation 2: Rice as Financialized Food in the Japanese Empire

Dr. Maeda KIYOTAKA (Keio University)

Abstract:

Since 2024, Japan has experienced a surge in rice prices, prompting a reconsideration of the management of staple food prices. It now has a new option for setting rice prices: The Osaka Dojima Exchange listed rice as a futures trading item in August 2024. Therefore, we should consider how to utilize rice futures trading. Historical experiences with rice futures trading in Japan, dating back to 1939, offer valuable insights. Japan's long history of rice futures trading began in the 18th century, during the pre-modern era (Schaede 1989). In 1730, the Tokugawa Shogunate authorized Dojima Kome Kaisho in Osaka to trade rice futures. In 1869, the new government that administered Japan since 1868 abolished it; however, in 1871, it allowed this exchange to resume. In the same year, other rice exchanges were established in Tokyo (Tokyo Grain Exchange 2003). From the 1870s to the 1930s, rice futures trading flourished in Japan through setting index prices for the spot market. Thus, this study analyzes rice futures trading to understand its functions and limitations, especially during the interwar period, when Japan tightened regulations on the rice trade and relied heavily on colonial rice supplies.

This paper comprises three sections. The first section examines the fluctuations in exchange trade to assess the impact of the government's rice policy on the rice futures market. The second section explains the methodology and functions of rice futures trading. The third section analyses the linkages between the rice markets of the metropole and its colonies within the Japanese Empire. Accordingly, these investigations led to the following conclusions.

During the interwar period, the government increased its control over rice prices. Although these measures have reduced rice futures trading, the market still provided key index prices for the spot market (Ito et al. 2017, 2018). This finding offers a useful reference for rice futures trading. However, attention should also be paid to the impact of colonial rice imports on futures market pricing after World War I. A mismatch in harvest seasons between the metropole and colonies in the Japanese Empire disrupted price formation in Japan's major exchanges in the 1930s, when big cities heavily imported rice from the colonies. Fluctuations in colonial rice prices dampened the seasonal patterns of rice futures prices on these exchanges (Maeda and Tsai 2025). This distortion changed the price relationships between the major urban and minor rural exchanges, which imported less colonial rice. Consequently, whereas the distribution of colonial rice exhibited geographic heterogeneity in Japan, colonial rice imports transformed price formation throughout Japan, including in rural areas (Maeda

2025). Therefore, when we incorporate the historical experience of rice futures trade into our policy decision-making processes, we mitigate the impact of colonial rice imports, although research on rice pricing in the Japanese Empire remains limited.

References:

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- Maeda, K. (2025) Osaka Kumamoto Beikoku Shijō no Kakaku Keisei [The Pricing of Rice Markets in Osaka and Kumamoto], in K. Maeda, and T. Shinone, eds., *Kokumotsu no Higashi Ajia Keizai Shi* [Modern East Asian Economic History of Cereal], Tokyo: Keio University Press.
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- Tokyo Grain Exchange (2003) *Tokyo Beikoku Torihikijo Shi* [History of the Tokyo Rice Exchange] (in Japanese).

Biography:

Dr. Kiyotaka Maeda is an Associate Professor of Modern Japanese Economic History at the Department of Japanese History, Faculty of Letters, Keio University, Japan. He holds a Ph.D. in Economics from Keio University. He specializes in cliometrics, a vital field in economic history, focusing on the commodity market in the Japanese Empire from the late 19th century through World War II. He has expanded his research to include Japanese colonies such as Taiwan, Korea, and Manchuria, examining the relationships among markets across the empire. His work uses time-series analysis, a common econometric method, applying high-frequency price data from historical documents stored in various archives. He has collaborated with scholars from Japan, the United States, Taiwan, and South Korea on multiple research projects. He and his colleagues present their findings at international conferences, such as the World Economic History Congress and the European Business History Association, and publish papers in international journals, such as *The Economic History Review* and *Business History*. By exploring the role of markets from a historical perspective, this study aims to deepen our understanding of market functions and contribute to their improvement.

Presentation 3: The Backstage and Frontstage of Public Firms in the Global Agrochemical Complex

Dr. Loka ASHWOOD (University of Wisconsin-Madison)

Abstract:

For over a century, the names of publicly traded firms have been the cross-generational means by which people celebrate and counter corporate power. Global corporations are image-minded, and they have responded to public relations risks and liabilities by segmenting production and investment into distinct private entities, sometimes to enable acquisitions and other times to reduce investor risk

(Belenzon, Lee and Pataconi 2023). The burgeoning business of incorporation services in the U.S. demonstrates just how common the practice now is: for a small fee, one can have an anonymous agent incorporate a firm of their choosing, with no requirements for proof of identity or address (Fitzgibbon, Crenziper, and Crites 2022). Scholarship shows that the more firms that compose a conglomerate, the more financial malfeasance and pollution that results (Prechel 2021).

Private firms operating by names unrecognizable to the public can sidestep democratic processes, like open and fair hearings, and limit culpability for compensation in cases of pollution (Merchant and Martin 2024). Yet a global analysis equal to the task of better understanding globally dominant firms faces a litany of challenges. Firms go private in part because they do not have to disclose much financially, particularly in the U.S. and Canada where there is limited financial reporting regulation and to varying extents, in China and South America.

Amidst these challenges, and with a series of limitations we discuss throughout the paper, we attempt to work our way into the complex menagerie of private firms and people behind the public ones. We use social network analysis as a method to compile and then analyze complex data on firms and people in the agrochemical complex globally. We use Sayari Graph, complemented with Bloomberg Finance L.P. and LexisNexis, to create a dataset of firms and people (also known in network analysis as nodes) related to nine publicly traded, agrochemical giants: BASF, Bayer, Corteva, Dow, DuPont de Nemours Inc, FMC, COFCO, ChemChina, and UPL. We use attributes (descriptors of nodes in the network, like business purpose or nation affiliation) and relationships (the tie of any one node to another, like shareholder, beneficial owners, or director) to find key players and sketch out what has been called an agrochemical assemblage, at least in terms of finance and leadership (Guthman 2019).

We use Goffman's (1956) dramaturgical perspective of the backstage and frontstage to capture the performative roles that public firms take relative to the exponential growth of private firms behind the scenes. Organizationally, we find an entangled menagerie of seventeen firms in the agrochemical complex that act as nests for publicly traded firms. A single public firm is not moored to a single nation. Rather, we capture nationalism as performative through the public firm, while in the backstage, nations across the world interact through lesser known entities, aliases, and a global network of people. We conclude by considering how bringing the backstage of firms into focus disrupts the frontstage performance of the public firm, providing a distinct pathway for tackling the consolidation and financialization preventing a more just and verdant future.

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Biography :

Loka Ashwood is a Professor of Community and Environmental Sociology at the University of Wisconsin-Madison. Loka uses interdisciplinary collaborations to expose the causes and dire implications of rural discontent while equipping rural communities with resources to build critical agency and advance their interest. She authored *For-Profit Democracy: Why the Government is Losing the Trust of Rural America* (Yale 2018) and is co-author of *Empty Fields, Empty Promises: A Guide to Understanding and Transforming the Right to Farm* (University of North Carolina 2023). She is a 2024 MacArthur Fellow.

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