

GEOG 474/ERS 473

Sustainable Food: Regional Case Study (China)

Department of Geography & Environmental Management Faculty of Environment Fall 2018

Course instructor Class time: Mon & Wed 2:30-3:50 in EV1-132

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With gratitude, we acknowledge that we are on the traditional territory of the Attawandaron (Neutral), Anishnaabeg, and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, land promised to Six Nations, which includes six miles on each side of the Grand River.

The <u>Waterloo Indigenous Student Centre</u> facilitates the sharing of Indigenous knowledge and provides culturally relevant information and support services for all members of the University of Waterloo community, including Indigenous and non-Indigenous students, staff, and faculty.

Course description

Industrial agriculture has destabilized the Earth's ecosystems at the planetary scale. Ecological as well as socio-cultural, economic, and political factors shape the sustainability and resilience of our food system. This seminar course takes a regional focus to ground our discussions of pertinent concepts, challenges, and opportunities. The course examines regional issues and initiatives linked to food security, food sovereignty, resilient agriculture and agro-ecology, the energy-water-food nexus, food policy, food supply chains, urban food systems, alternative food initiatives, sustainable diets, and food waste reduction—all within the context of the case study region.

Detailed description

In this course, we draw on environmental, economic, socio-cultural, health, and political perspectives to examine the challenges and successes of the food system in the world's most populous country: China. We cover the history and geography of food security in China; debates over feeding the most populous nation on earth; and threats to soil fertility, clean water, and farmland loss. The bulk of the course then focuses on alternatives: what initiatives are underway to strengthen sustainable agriculture, agroecology, and 'alternative food networks,' such as community supported agriculture and ecological farmers' markets? Who are the key players? What role is technology and the internet playing in all this, for consumers, and for farmers? We review 'grassroots', private sector, and state policy initiatives to promote a 'sustainable' food system in urban and rural areas of China, and assess their relative successes and their domestic and global implications. We explore food security, meat consumption,

food waste, China's rapidly expanding organic sector (certified and uncertified), and the associated revolution that is happening in ecological, healthy, safe food and ethical eating in China's cities.

Course Objectives

By the end of the course, student should have acquired the following:

- Current knowledge of the case study region's food and agriculture system, its resources, demographic and economic shifts, governance approaches, and key challenges and opportunities
- Understanding of contemporary principles and approaches to sustainable food systems, and how they apply to the case study region
- Skills and knowledge needed to evaluate the strengths and weaknesses of current and emerging approaches to dealing with food system challenges in the case study region
- Improved research, oral and written communication, teamwork, and critical thinking skills

Teamwork is crucial to achieving change. Thus, this course offers you the opportunity to work in groups to research an issue and present your research output.

The format for the 80-minute classes will be a combination of seminar discussions, lectures, guest speakers, videos, and student presentations.

Intended learning outcomes

Upon completion of this course, you should be able critically analyze and explain...

- 1. the historical development of China's contemporary food system, and associated key concepts
- 2. some key environmental, economic, social, and political challenges to food system sustainability in China
- 3. some significant policy (state-led), market-oriented, and civil society initiatives to improve food system sustainability

Course content

Week 1 (Sept 10 & 12). Overview and food systems introduction

[in class on Sept 10] Country Food Sustainability Index.

Food Climate Research Network. 2015. **Overview of changes and drivers.** Manchester: FCRN China Briefing paper.

National Geographic. 2018. How China Plans to Feed 1.4 Billion Growing Appetites. Feb.

Week 2 (Sept 17 & 19). 'Who will feed China?' History and geography of food security and agrarian change in the world's most populous country

Zhou, Zhang-Yue. 2015. "Food security in China: past, present and the future." In Udaya Sekhar Nagothu (ed.), *Food security and development: Country case studies*. Routledge, pp.35-56.

Zhang, Hongzhou. 2018. *Securing the 'Rice Bowl': China and Global Food Security*. London: Palgrave. [Chapter 3: Scaling Up and Cleaning Up the Farmland, pp.65-93]

Week 3 (Sept 24 & 26). Food, climate change, soils, water, and oceans

Food Climate Research Network. 2015. **Environmental transformations**. Manchester: FCRN China Briefing paper.

Food Climate Research Network. 2015. Focus on aquaculture. Manchester: FCRN China Briefing paper.

Wang, Jinxia, Yanrong Li, Jikun Huang et al. 2017. Growing water scarcity, food security and government responses in China. *Global Food Security*. 14: 9-17.

Week 4 (Oct 1 & 3). Market reforms, urbanization and the countryside in China

Food Climate Research Network. 2015. **Supply chain transformations**. Manchester: FCRN China Briefing paper.

Food Climate Research Network. 2015. <u>Socio-cultural transformations</u>. Manchester: FCRN China Briefing paper.

Schneider, M. 2015. What, then, is a Chinese peasant? Nongmin discourses and agroindustrialization in contemporary China. *Agriculture and Human Values*, *32*(2), 331–346.

Week 5 Changing diets, dairy & meatification: environmental and health outcomes

*For this week, the deadline for Perusall comments is Thursday at 11:59pm (instead of Tuesday).

Food Climate Research Network. 2015. <u>Health Transformations</u>. Manchester: FCRN China Briefing paper.

Food Climate Research Network. 2015. Focus on livestock. Manchester: FCRN China Briefing paper.

Food Climate Research Network. 2015. Focus on dairy. Manchester: FCRN China Briefing paper.

IATP. <u>The Need for Feed: China's Demand for Industrialized Meat and Its Impacts</u>. In *Global Meat Complex: The China Series*. https://www.iatp.org/collection/global-meat-complex-china-series

Week 6 (Oct 15 & 17) Food safety, organic food, and state support for ecological agriculture

S. Scott, Zhenzhong Si, Theresa Schumilas, and Aijuan Chen. 2018. <u>Organic Food and Farming in China:</u> <u>Top-down and Bottom-up Ecological Initiatives</u>. London: Routledge. [Chapter 3. Top-down initiatives: state support for ecological and organic agriculture in China]

Klein, J.A., 2013. Everyday approaches to food safety in Kunming. The China Quarterly, 214, pp.376-393.

Week 7 (Oct 22 & 24) Alternative Food Networks (AFNs)

Loconto, A., Jimenez, A. & Vandecandelaere, E. 2018. "Case study of Shared Harvest Farm, Beijing, China." Appendix in <u>Constructing markets for agroecology: An analysis of diverse options for marketing products from agroecology</u>. Rome: FAO, pp.123-132.

S. Scott, Zhenzhong Si, Theresa Schumilas, and Aijuan Chen. 2018. <u>Organic Food and Farming in China:</u> <u>Top-down and Bottom-up Ecological Initiatives</u>. London: Routledge. [Chapter 5. Bottom-up initiatives: the emergence of "alternative" food networks]

Week 8 (Oct 29 & 31). Farmers' roles in producing sustainable food

Qiao, Yuhui, He Xueqing, Niels Halberg, Seth Cook, S. Scott, Friederike Martin, and Xihe Pan. 2017. "Certified Organic Agriculture as an Alternative Livelihood Strategy for Small-scale Farmers in China: A Case Study in Wanzai County, Jiangxi Province." Ecological Economics, 145: 301-307.

Orderud, Geir Inge, Rolf Vogt, Tom Anderson, and Jing Luo. 2015. Explaining and understanding environmental actions in Chinese agriculture: The case of Yuqiao watershed of Tianjin municipality. *International Journal of Sustainable Development and World Ecology*, 22(6): 496-509.

Week 9 (Nov 5 & 7). Technology & the internet in sustainable food debates in China

Zhao, Jennifer, Peter Ho, Dayuan Xue and Jac Swart. 2015. "Biotech politics in an emerging economy: Is China a developmental risk society? In Heather Xiaoquan Zhang (ed.), *Rural Livelihoods in China: Political economy in transition*. London: Routledge.

Chen, Weiping & Si Tan. 2018. <u>Impact of social media apps on producer–member relations in China's community supported agriculture</u>. *Canadian Journal of Development Studies*.

The Western Producer. 2018. Indoor farming startup Plenty eyes rollout in China, Japan. Jan 17.

Quartz. 2017. <u>Facial recognition and blockchain technology applied on organic chicken in China</u>. Dec 15. Globe and Mail. <u>China counting on saltwater rice in its One Belt, One Road aspirations</u>. Aug 26.

Week 10 (Nov 12 & 14). Urban planning and urban agriculture

Zhenzhong Si and Steffanie Scott. 2016. "<u>Approaching Sustainable Urban Development in China through a Food System Planning Lens</u>." Hungry Cities Partnership Discussion Paper 2.

Geoff Luehr, Alesandros Glaros, Zhenzhong Si & Steffanie Scott. (in press). "Urban agriculture in Chinese cities: Practices, motivations and challenges." In Alec Thornton (ed.). *Urban Food Democracy and Governance in North and South*. London: Palgrave.

Week 11 (Nov 19 & 21). Review and Conclusions

Food Climate Research Network. 2015. <u>Summary, conclusions and policy implications</u>. Manchester: FCRN China Briefing paper.

S. Scott, Zhenzhong Si, Theresa Schumilas, and Aijuan Chen. 2018. <u>Organic Food and Farming in China:</u> <u>Top-down and Bottom-up Ecological Initiatives</u>. London: Routledge. [Chapter 10.]

Week 12 (Nov 26 & 28). Student Presentations, The future, and What can Canada learn from China, and what can China learn from Canada, about sustainable food?

Zhang, Hongzhou. 2018. "Chapter 10. A Hungry China and the Future of Global Food Governance". In Hongzhou Zhang, Securing the 'Rice Bowl'. Springer, pp 265-295.

Assessment of learning & due dates

Unless otherwise specified, due dates are 11:59pm on the date indicated.

		Due dates	
Online discussion of readings (using Perusall)	20 %	Weekly, by Tues 11:59pm	
In class participation	10 %		
Midterm test	10 %	Oct 15	
Take-home test	15 %	Dec 7	
Term project – in groups: (40% + 5%)			
Project proposal	5 %	Sept 27	
Group contract		Sept 28	
Oral presentation of project	10 %	Nov 26 & Dec 3	
Project - draft version (required in order for final version to be marked)	1 %	Nov 16	
Peer review of one project (on PEAR website)	5 %	Nov 23	
Project – final version	24 %	Nov 30	
Group self-assessment (required for your proposal grade) – in PEAR website		Dec 3	

Use of Perusall for online discussion of course readings

This is a seminar course. As such, a key focus of the course is discussion (online and in class) of a set of assigned readings. We are experimenting this term with the <u>Perusall</u> platform to facilitate this. *Be sure to allocate sufficient prep time out of class each week for this activity.*

See "How Perusall Works" posted on Learn. Also see "How Scoring Works" and this set of sample annotations with associated quality scores and an explanation for each score.

You are expected to provide comments or questions on all of the assigned readings, but you can be excused without penalty from not providing comments on any 3 readings over the term. For each reading, typically you should provide about 6-7 short comments. Focus on providing comments/questions about the following elements (although you can certainly go beyond this):

- 1. the key conclusions and arguments of the reading (feel free to skip this if many classmates have already covered this!);
- 2. the element of the reading that you found most interesting, persuasive, well-argued, or thought-provoking, and explain why;
- 3. the element of the reading that you found most problematic, least persuasive, or most in need of further elaboration, and explain why;
- 4. connections between the content of the readings and your own experiences, knowledge, or assumptions;
- 5. connections between the current reading and past readings in the course (do they concur or differ? How so?).

Note that misuse of Perusall--for example, posting comments as your own that are copied from external web sites or other sources--will be treated as every other type of academic misconduct and will, at a minimum, result in an overall Perusall score of zero for the semester.

Term project

You can chose the specific audience and type of output that you are most interested in developing for this task:

- the general public (e.g., in the form of a magazine article)
- government (e.g., a policy brief)
- a funding agency (e.g., a funding proposal, written from the perspective of an NGO)
- students (e.g., an online case study such as the ones <u>here</u>)
- academic readers (e.g., a term paper)

Speak to the instructor if you would prefer to prepare your project in the form of a video.

You are encouraged to work **in groups** to complete the project. The length of the final output should be 1600-2000 **words per person** times the number of people in your group. However, the project should be jointly written by all group members. If you prefer to complete the project on your own, the length should be 2500-3000 words.

Additional readings and resources (for your term projects) on China's food system

Websites

chinafoodwatch.com

Feeding China reading list: https://feedingchina.wordpress.com/bibliography/

LinkedIn group, China's Changing Food System (feel free to post resources or questions here)

Food systems in general (not China-specific)

See Food Climate Research Network (FCRN)

Campbell, B. M., D. J. Beare, E. M. Bennett, J. M. Hall-Spencer, J. S. I. Ingram, F. Jaramillo, R. Ortiz, N. Ramankutty, J. A. Sayer, and D. Shindell. 2017. Agriculture production as a major driver of the Earth system exceeding planetary boundaries. *Ecology and Society*, 22 (4): 1-8.

McIntyre, Beverly D. 2009. <u>Agriculture at a Crossroads: International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) - East and South Asia and the Pacific (ESAP) Report.</u> Washington, DC: Island Press.

Friesen, Scott. 2016. From Uniformity to Diversity: A Paradigm Shift from Industrial Agriculture to Diversified Agroecological Systems. Brussels: International Panel of Experts on Food Systems (IPES-Food). [Also see other IPES reports]

Holt-Giménez, Eric. 2017. *A Foodie's Guide to Capitalism: Understanding the Political Economy of What We Eat*. Monthly Review Press.

Food security and overview of China's food systems

Smil, Vaclav. 2004. *China's Past, China's Future: energy, food, environment*. London: Taylor and Francis.

Zhang, Hongzhou. 2018. Securing the 'Rice Bowl': China and Global Food Security. London: Palgrave.

Lu, Y., Jenkins, A., Ferrier, R. C., Bailey, M., Gordon, I. J., Song, S., and Zhang, Z. (2015). Addressing China's grand challenge of achieving food security while ensuring environmental sustainability. *Science Advances*, (February), 1–5.

UN Special Rapporteur on the Right to Food. 2010. <u>Mission to the People's Republic of China.</u> <u>Preliminary Observations and Conclusions.</u> 23 Dec. Beijing. 6 p.

Schwoob, Marie-Hélène. 2018. Food Security and the Modernisation Pathway in China. Palgrave? [see chapters: "Resulting Lock-Ins Impeding Transition Toward Environmental and Social Sustainability" and "Enterprises: The New Leaders of Agricultural Modernization"]

Cui, K. and Shoemaker, S.P. 2018. A look at food security in China. Nature.

Li, Y., Zhang, W., Ma, L., Wu, L., Shen, J., Davies, W. J., & Dou, Z. (2014). An analysis of China's grain production: looking back and looking forward. *Food and Energy Security*, *3*(1), 19-32.

Yan, H., and Chen, Y. 2015. Agrarian capitalization without capitalism? Capitalist dynamics from above and below in China. *Journal of Agrarian Change*, 15 (3), 366-391.

Hyde, M and Syed, F. 2014. *China's food self-sufficiency policy*. Agricultural commodities report. Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES). Canberra, Australia.

Ray A. Goldberg. 2018. Food Citizenship. Oxford University Press. [includes a chapter on China]

Environmental governance of food, agrochemicals, biodiversity, soils, climate change, and water

Smil, Vaclav. 2004. China's Past, China's Future: energy, food, environment. London: Taylor and Francis.

Wang, Jinxia, Yanrong Li, Jikun Huang et al. (2017) Growing water scarcity, food security and government responses in China. *Global Food Security*.

Rogers, S., 2016. <u>Adaptation science and policy in China's agricultural sector</u>. *Wiley Interdisciplinary Reviews: Climate Change*, *7*(5), pp.693-706.

Hannah Reid, Yiching Song, Yanyan Zhang, Guanqi Li. 2016. <u>Reducing climate risk and poverty: why China needs ecosystem-based adaptation.</u> International Institute for Envronment and Development (IIED) Briefing.

Yan, Huiqi, et al. 2016. "The Enforcement–compliance Paradox: Implementation of Pesticide Regulation in China." *China Information* 30 (2):209–31.

Zhu, Xinguang et al. 2016. Building the new international science of agriculture-food-water-environment Nexus in China and the world. *Ecosystem Health and Sustainability*, 2(11): e01249.

Lu, Y., Song, S., Wang, R., Liu, Z., Meng, J., Sweetman, A. J., & Wang, T. (2015b). Impacts of soil and water pollution on food safety and health risks in China. *Environment international*, 77, 5-15.

Xu, Z, Xu, J, Deng, X, and Huang, J 2006, "Grain for Green versus grain: Conflict between food security and conservation set-aside in China," *World Development*, vol. 34, no. 1, pp. 130–148.

Ju Y, Zhuo J, Liu B, Long C. 201.3 <u>Eating from the wild: diversity of wild edible plants used by Tibetans in Shangri-la region, Yunnan, China</u>. *Journal of Ethnobiology and Ethnomedicine*. 9(28): 1-22.

Liu, Y., Duan, M. and Yu, Z., 2013. Agricultural landscapes and biodiversity in China. *Agriculture, ecosystems & environment*, 166, pp.46-54.

Ho, Peter. 2003. "Mao's War against Nature? The Environmental Impact of the Grain-First Campaign in China." *The China Journal*, no. 50 (July):37–59.

Seeds and sustainability

Matt Gaudreau. 2018. <u>State food security and people's food sovereignty: competing visions of agriculture in China</u>. *Canadian Journal of Development Studies*.

Song, Y., Yiching, S. and Vernooy, R. (eds.), 2010. <u>Seeds and synergies: Innovation in rural development in China</u>. Ottawa: International Development Research Centre (IDRC).

Zhang, Hongzhou. 2018. *Securing the 'Rice Bowl'*. London: Springer. [chapter on "Genetically Modified Organisms (GMOs) as the New Hope," pp 95-123.

Fisheries and aquaculture

Cao, L., Naylor, R., Henriksson, P., Leadbitter, D., Metian, M., Troell, M. and Zhang, W., 2015. China's aquaculture and the world's wild fisheries. *Science*, *347*(6218), pp.133-135.

Godfrey, Mark. 2018. From Indonesia to Norway, China looking to invest in aquaculture overseas. Seafoodsource, June 19. → See other news stories about Chinese fisheries and agriculture by this journalist at https://muckrack.com/mark-godfrey/articles.

Environmental issues in China (beyond food)

Sternfeld, Eva (ed.). Routledge handbook of environmental policy in China. (selected chapters)

Shapiro, J., 2001. *Mao's war against nature: Politics and the environment in revolutionary China*. Cambridge University Press.

Shapiro, J., 2016. China's environmental challenges. 2nd edition. New York: Wiley.

Fürst, K., & Holdaway, J. (2015). Environment and Health in China: The Role of Environmental NGOs in Policy Innovation, In Fulda A. (ed.) *Civil Society Contributions to Policy Innovation in the People's Republic of China*. The Nottingham China Policy Institute Series. Palgrave Macmillan, London, pp 33-76.

Ho, P. and Edmonds, R. eds., 2007. *China's embedded activism: opportunities and constraints of a social movement*. Routledge.

Zhang, Ling. 2013. "Manipulating the Yellow River and the State Formation of the Northern Song Dynasty." In *Nature, Environment and Culture in East Asia: The Challenge of Climate Change*, edited by Carmen Meinert, 137–59. Leiden: Brill.

Zhang, Yan. *Governing the Commons in China*. Routledge.

Hayes, Jack Patrick. 2010. "Modernisation with Local Characteristics: Development Efforts and the Environment on the Zoige Grass and Wetlands, 1949-2005." *Environment and History* 16 (3):323–47.

Sze, Julie. 2015. "Dreaming Green: Engineering the Eco-City." In *Fantasy Islands: Chinese Dreams and Ecological Fears in an Age of Climate Crisis*. Oakland, California: University of California Press.

Eberhardt C. 2015. "Discourse on Climate Change in China: A Public Sphere without the Public." *China Information* 29 (1):33–59.

Xie L. 2016. "Environmental Governance and Public Participation in Rural China." *China Information* 30 (2):188–208.

Chinese Ideas of Nature

Weller, Robert P., and Peter K. Bol. 1998. "From Heaven-and-Earth to Nature: Chinese Concepts of the Environment and Their Influence on Policy Implementation." In Michael B McElroy, Chris P Nielsen, and Peter Lydon (eds.), *Energizing China: Reconciling Environmental Protection and Economic Growth*. Cambridge: Harvard University Press, 473–99.

Roetz, Heiner. 2013. "Chinese 'Unity of Man and Nature': Reality or Myth?" In Carmen Meinert (ed.), *Nature, Environment and Culture in East Asia: The Challenge of Climate Change*. Leiden: Brill, 23–39.

Perdue, Peter C. 2010. "Is There a Chinese View of Technology and Nature?" In Martin Reuss and Stephen H Cutcliffe (eds.), *The Illusory Boundary: Environment and Technology in History*. Charlottesville: University of Virginia Press, 101–19.

Weller, Robert P. 2006. "Night of the Living Dead Fish." In *Discovering Nature: Globalization and Environmental Culture in China and Taiwan*. Cambridge: Cambridge University Press, 19–42.

Changing diets, dairy & meatification: environmental and health outcomes

Klein, J. A. (2017). Buddhist vegetarian restaurants and the changing meanings of meat in urban China. *Ethnos*, 82(2), 252-276.

The Economist. 2014. Empire of the Pig. Dec 17.

Schneider, Mindi. 2017. "Wasting the Rural: Meat, Manure, and the Politics of Agro-Industrialization in Contemporary China." *Geoforum* 78 (1): 89–97.

Schneider, M. (2011). Feeding China's Pigs: Implications for the Environment, China's Smallholder Farmers and Food Security.

IATP. 2014. Global Meat Complex: The China Series:

China's Meat Revolution: Agribusiness, Growth and Its Limits

China's Meat Revolution and its Need for Feed

China's Dairy Dilemma: The Evolution and Future Trends of China's Dairy Industry.

Sangamithra Iyer, Mia MacDonald. 2011. <u>Skillful Means: The Challenges of China's Encounter with</u> Factory Farming. New York: Brighter Green.

China Dialogue. China needs to assess the true costs of factory farming.

Market reforms and the countryside in China

S. Scott, Zhenzhong Si, Theresa Schumilas, and Aijuan Chen. 2018. <u>Organic Food and Farming in China:</u> <u>Top-down and Bottom-up Ecological Initiatives</u>. London: Routledge. [Chapter 2. Transformations in China's food system.]

Zhang, Q. F., & Pan, Z. 2013. The transformation of urban vegetable retail in China: wet markets, supermarkets and informal markets in Shanghai. *Journal of Contemporary Asia*, 43(3), 497-518

Mindi Schneider. 2017. Dragon head enterprises and the state of agribusiness in China. *Journal of Agrarian Change*, *17*(1), 3-21.

Mindi Schneider. 2011. <u>Feeding China's Pigs: Implications for the Environment, China's Smallholder Farmers and Food Security</u>. Institute for Agriculture and Trade Policy (IATP).

Hu, Zhanping, and Sanzidur Rahman. 2016. <u>Beyond a bottle of liquid: pesticide dependence in transitional rural China</u>. *Local Environment* 21.8: 919-938.

Wu, F. 2008. China's great transformation: Neoliberalization as establishing a market society. *Geoforum*, 39.3: 1093–1096.

Schmalzer, S., 2016. *Red revolution, green revolution: Scientific farming in socialist China*. University of Chicago Press.

Small-scale farmers' livelihoods, farmers' cooperatives, and agrarian change in China

Hayward, J., 2017. Beyond the ownership question: who will till the land? The new debate on China's agricultural production. *Critical Asian Studies*, 49(4), pp.523-545.

Huang, J., Wang, X., & Qiu, H. (2012). Small-scale farmers in China in the face of modernisation and globalisation. International Institute for Environment and Development (IIED)/HIVOS, London/The Hague.

Huang, PC. 2011. <u>China's new-age small farms and their vertical integration: agribusiness or co-ops?</u> *Modern China*, *37*, 107–134.

Song, Y., Qi, G., Zhang, Y., & Vernooy, R. 2013. <u>Farmer cooperatives in China: diverse pathways to sustainable rural development</u>. *International Journal of Agricultural Sustainability*, 1–14.

Yang, H., Vernooy, R. and Leeuwis, C., 2017. Farmer cooperatives and the changing agri-food system in China. *China Information*, 1-20.

Zhang, Qian Forrest & Donaldson, J. (2008). The Rise of Agrarian Capitalism with Chinese Characteristics: Agricultural Modernization, Agribusiness and Collective Land Rights. *China Journal*, 60.

Wang, K.C., 2018. East Asian food regimes: agrarian warriors, edamame beans and spatial topologies of food regimes in East Asia. *The Journal of Peasant Studies*, 45(4), pp.739-756.

Paul Belesky & Geoffrey Lawrence (2018) <u>Chinese state capitalism and neomercantilism in the</u> contemporary food regime: contradictions, continuity and change. *The Journal of Peasant Studies*.

Bernstein, H. (2015). Some reflections on agrarian change in China. *Journal of Agrarian Change*, 15 (3), 454-477.

Zhang, Qian Forrest, Oya C, Ye, J. 2015. Bringing Agriculture Back In: The Central Place of Agrarian Change in Rural China Studies. *Journal of Agrarian Change*.

Van der Ploeg, JD and J Ye (eds.). 2016. China's peasant agriculture and rural society. Routledge.

Farmers' roles in sustainable/ecological/organic agriculture

Seth Cook and Lila Buckley. *Multiple Pathways: Case studies of sustainable agriculture in China*. London: International Institute for Environment and Development.

S. Scott, Zhenzhong Si, Theresa Schumilas, and Aijuan Chen. 2018. <u>Organic Food and Farming in China:</u> *Top-down and Bottom-up Ecological Initiatives.* London: Routledge.

Ding, et al. 2018. The new urban agricultural geography of Shanghai. Geoforum, 90: 74-83.

Cody, S. (2018). Borrowing from the Rural to Help the Urban: Organic Farming Exemplars in Postsocialist China. *The Asia Pacific Journal of Anthropology*, 19(1), 72-89.

Agricultural subsidies that impede sustainable agriculture

China Daily. 2015. Agricultural subsidies 'should be reconsidered'.

Huang, J., et al. 2011. <u>Subsidies and distortions in China's agriculture: evidence from producer-level</u> data. *Australian Journal of Agricultural and Resource Economics*, 55, pp. 53–71.

Li, Y., et al. 2014. An Analysis of China's Fertilizer Policies: Impacts on the Industry, Food Security, and the Environment. Journal of Environmental Quality, 42(4), pp. 972-981.

Smith, L. E. D., & Siciliano, G. (2015). <u>A comprehensive review of constraints to improved management of fertilizers in China and mitigation of diffuse water pollution from agriculture</u>. *Agriculture, Ecosystems & Environment*.

Food safety and the crisis of trust

Veeck, A., Yu, H., & Burns, A. C. (2010). Consumer risks and new food systems in urban China. *Journal of Macromarketing*, 30(3), 222-237.

Zhang, L., Xu, Y., Oosterveer, P., & Mol, A. P. (2016). Consumer trust in different food provisioning schemes: evidence from Beijing, China. *Journal of Cleaner Production*, *134*, 269-279.

Zhenzhong Si, Jenelle Regnier-Davies*, and S. Scott. 2017. "Food Safety in Urban China: Perceptions and Coping Strategies of Residents in Nanjing." China Information, 1-23.

John Kojiro Yasuda. Why Food Safety Fails in China: The Politics of Scale. China Quarterly.

Sustainability transitions and innovation in sustainable food production and consumption

UK-China Sustainable Agriculture Innovation Network (SAIN). <u>Report on accomplishments during 2008-</u>2017.

Sam Geall & Adrian Ely. 2018. Agri-food transitions and the "green public sphere" in China. *Environmental Innovation and Societal Transitions*.

Ely, A., Geall, S., & Song, Y. (2016). Sustainable maize production and consumption in China: practices and politics in transition. *Journal of Cleaner Production*, *134*, 259-268.

Urban food systems, food self-sufficiency and food flows in Chinese cities

Jiang, L., Seto, K.C. and Bai, J., 2015. Urban economic development, changes in food consumption patterns and land requirements for food production in China. *China Agricultural Economic Review*, 7(2), pp.240-261.

Zhou, D., Matsuda, H., Hara, Y. and Takeuchi, K., 2012. Potential and observed food flows in a Chinese city: a case study of Tianjin. *Agriculture and human values*, 29(4), pp.481-492.

Lang, G., & Miao, B. (2013). Food Security for China's Cities. International Planning Studies, 18(1), 5–20.

Si, Zhenzhong, with Jonathan Crush, Steffanie Scott, and Taiyang Zhong. 2016. "The Urban Food System of Nanjing." Hungry Cities Partnership Report 1.

Si, Zhenzhong & Taiyang Zhong. 2018. *The State of Household Food Security in Nanjing China*. Hungry Cities Report No. 9.

Si, Zhenzhong & Steffanie Scott. 2016. *Approaching Sustainable Urban Development in China through a Food System Planning Lens*. Hungry Cities Discussion Paper No. 2.

Sustainable diets and food carbon consumption

Song, G., Gao, X., Fullana-i-Palmer, P., Lv, D., Zhu, Z., Wang, Y. and Bayer, L.B., 2019. Shift from feeding to sustainably nourishing urban China: A crossing-disciplinary methodology for global environment-food-health nexus. *Science of The Total Environment*, 647, pp.716-724.

Luo, T., Ouyang, Z. and Frostick, L.E., 2008. Food carbon consumption in Beijing urban households. *The International Journal of Sustainable Development & World Ecology*, *15*(3), pp.189-197.

Alternative Food Networks (AFNs) and social movements

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Multiple sustainability criteria to be considered across the food supply chain

	Health	Social well-being	Economic	Environmental
Food production				
Processing				
Distribution & exchange				
Retail & food access				
Consumption				
Management of food waste				