

ENVIRONMENTAL POLITICS OF AGRICULTURE POL 355

Fall, 2020

Instructor: Takeshi Ito
Office: 10-530
Office hours: by appointment

Class: Tue & Fri, 10:55-12:35
E-mail: takeshi.ito@sophia.ac.jp
Website: www.kasasustainability.org
Instagram: @kasasustainability

GENERAL GUIDELINES

Course Description

The right to food is a basic human right recognized by the United Nations' Declaration of Human Rights (Article 25). Despite 60 years of tireless efforts by the international community, however, "food security remained a broken promise for millions, especially in rural Africa and Asia", said Jean Ziegler, the UN Special Rapporteur on the right to food.

"Last year [2005], 852 million people were severely undernourished, up 11 million from 2004. An estimated 320,000 were at risk for starvation in war-torn Darfur, and 12 per cent of the population, in the Democratic People's Republic of Korea, suffered from severe hunger. Worldwide, a total of 6 million children, under the age of five, died every year, from malnutrition and related diseases."

The above statement illustrates that food is one of the most pressing global issues today. Our everyday relations to food need to be grounded in relation to environmental, geographical, and historical contexts.

This course explores the making of the global agro-food system and its role in shaping international relations of food and transformation of agrarian societies from a multi-disciplinary perspective. We focus on political economy questions relating to who are the winners and losers from contemporary patterns of global economic change. This includes the analysis of relevant conceptual approaches to these questions (including international trade, comparative advantage, food regime theory, regionalism, economic governance, development and post-development, etc) as well as close examination of the key institutions (WTO and WB) driving these changes. In so doing, this course aims to develop the ability to think critically about how and why our everyday relations to food (from production to consumption) have dramatically transformed over the last century and how this transformation affects the environment.

This course is divided into three main themes. First, we study the international structures of food trade, production, and consumption. What role does agriculture play in domestic and international politics? What is the global food regime? Who sets the rules? The second theme of the course is to evaluate the impacts of the global food systems on the Global South (in particular, smallholders of agricultural land). Why is world hunger still

pervasive despite repeated efforts by the international community? Does world hunger originate from not producing enough food? Does trade liberalization help eliminate world hunger? Third, we shift our focus to food security, chains, agro-food supply chains, and alternative farming. The global food and energy crises of 2007-2008 (together with the financial crisis) illustrated the importance of food security and food sovereignty. In sum, we think about not only how our food gets to our table but also what alternatives exist for the future of agriculture.

Course Requirements and Grading

1. Class Engagement: 20%

A main goal of this class is to nurture critical thinking. Although the class will be structured around lectures, I try to create as many opportunities as possible for students to actively participate in discussions. Students' participation is evaluated based on their contributions to group-based discussions. *Please print out the readings and come to class prepared*, having completed your readings and reading to discuss them. Ask each other hard questions, listen to your peers' responses and respect the opinions of instructors and classmates. My hope is that the course will stimulate your intellectual curiosity and help you find your academic interests that you'd like to pursue in depth. Remember, there are no wrong answers; but you must be able to support your argument with sound reasoning!

Attendance is very important. I expect you to attend every class. Missing class will hurt you in two ways. First, you will miss the thesis of the readings that we will take up in class. This will have significant impact on what you get out of this course. Second, I will dock five points from your final grade for each unexcused absence. If you are late to the class and miss attendance, that also counts as missing a class. *More than five undocumented absences will automatically result in a failing grade (no credit)*. Should you be forced to miss a class because of sickness or family emergency, you must present a letter from a doctor or the Chair of FLA. Should you be forced to miss class because of athletic and other activities, you must inform the instructor ahead of time and present a letter from your supervisor.

2. Summaries: 30%

Students are expected to write a short summary (around 3-400 words) of the readings for each session and to submit to Moodle by 10 am each class the readings are due. This is a great way to organize your thoughts and to check your comprehension. Students' summaries are evaluated on the basis of comprehension and timeliness: Three points for a fine summary; two points for a good summary; one point for a summary of acceptable quality; and zero point for late or non-submission. Plagiarism automatically results in a failing grade for the entire course (see Academic Conduct).

3. Presentation 20% and Analytic Paper 30%

Students will explore how the production and consumption through the export and import of foods has transformed local livelihoods and environments—i.e., landscapes/seascapes/riverscapes. In this assignment, we study the flows of agricultural commodities such as **corn, livestock, salmon, palm oil, coffee**, and **sugar** between Canada, Chile, Indonesia, Japan, Norway, Thailand, Vietnam, and the US. Questions to be answered: how are the global networks of production and consumption transforming local environments (forests, wetlands), riverscapes (river basins), and seascapes (shorelines) in

these countries? Issues to be examined: 1) production levels and history, 2) trade and agriculture policy (free trade agreements, promotion and protection of agriculture, tariffs, quotas, etc.) and history, 3) environmental impacts and regulations. The length of the analytic paper is between 2,000 and 2,500 words plus figures and tables.

Grade Distributions

Participation:	20%
Summaries	30%
Presentation and Analytic Paper	50%

Grade cutoff points are as follows: A = 91-100%; B = 81-90%; C = 71-80%; D = 61-70%; NC = < 62%.

Expectations and Responsibilities

I am excited about this course! I expect you to be excited about the course, too. This excitement carries us through the entire semester. However, sustaining the excitement is not easy. There are times when you are distracted by what surrounds you in everyday lives. But I want you to keep focused on what you are doing throughout the semester. I want you to engage with the readings which may seem sometimes abstract and challenging to you at this early stage in your college education. **Never give up on the readings!** If you cannot comprehend at all, try to pick up some key points, and try to capture a big picture that the author is trying to put together. In other words, you should not be bogged down by every detail, and come to class with your thoughts and questions. It is my hope and responsibility that some disconnected ideas make a sense by the end of the semester. Therefore, I encourage you to keep up with your good work because only such a work habit can bear fruit in the long run.

I expect you to come to class prepared to engage. I believe that active and intelligent class participation is essential part of effective learning. Being able to address your thoughts in class is an important skill that you will need to develop in/beyond this semester. Getting readings done does not mean that you have something to say about them. **This class requires at least five-six hours of preparation each week**, depending on your familiarity with key concepts in political science. I strongly suggest that after finishing the reading assignment for each class session, you spend 15-30 minutes preparing for class. This time helps organize your thoughts that you might want to address in class. In addition, it is important to know that what I expect from you is not accuracy but your effort to engage.

You can expect me to work very hard to create a valuable learning environment for you. **I am always open to suggestions as to how we can make our class a better environment for you to learn.** I will give you my feedback on your paper promptly, meet with you for advising, and write you reference letters (e.g., internships, scholarships, and graduate schools) in/beyond this semester. In other words, I will make time for you.

Academic Conduct

Plagiarism and cheating of any kind are strictly forbidden. Plagiarism entails borrowing ideas from others without attributing sources. I have zero tolerance for plagiarism and cheating. Any misconduct will automatically result in no credit.

Accommodations for Students with Disabilities

If you have a disability and require accommodations for this course, please speak with me as soon as possible so that your needs may be appropriately met.

Late Policy

Late works will not be accepted under any circumstances. I will dock your paper grade third a letter grade (e.g., an B- to a C or from a C to a C-) for each day. Special Arrangements will only be made in the case of sickness (requiring a doctor's note) or family emergency (requiring a Chair's note).

Important Etiquettes

In order to create a pleasant study environment for everyone, please follow these etiquettes. *Please turn off your cell phones when you enter the classroom. **Cell phones must be put away at any time during the class. When found using a phone, I will ask you to leave the class.** Please come to the class on time.* Please note that *voluntary late arrivals and early departures do not count as one class attendance.* These are just a few things that distract our attention. For other issues, please use your common sense, and treat one another with respect and courtesy. If problems continue to disturb the proper procedures of class, I will ask disruptive students to leave the class.

Appointments with the Instructor

Meeting with professors could be challenging for students. Although I know exactly how you feel, I encourage you to TALK to me in person on any subjects related to class. My office is located at 10-530. If you cannot make it during my office hours, please email me for an appointment. In principle, I use my email to make appointments rather than consultations. I am also available for coffee/tea.

Textbooks

All the readings except the books are available on Moodle. The two books required for this course are:

Clapp, Jennifer. 2012. *Food*. Cambridge: Polity Press.

Rosset, Peter. 2006. *Food is Different: Why We Must Get the WTO Out of Agriculture*. London: Zed Books.

COURSE OUTLINE

1. Tuesday, September 29

Introduction to the Course, Topics, and Syllabus

Zimmer, Carl. 2015. "For Evolving Brains, a Paleo Diet of Carbs." *New York Times*. August 13.

"Is the era of Big Food coming to an end?" *Guardian* March 12, 2015.

<http://www.theguardian.com/sustainable-business/2015/mar/12/big-food-agriculture-brands-health-organic-packaged>

Recommended

Massey, Doreen. 1994. *Space, Place and Gender*. Cambridge: Polity: 146-156 ("A Global Sense of Place").

Jackson, Peter. 2006. "Thinking Geographically." *Geography* 91(3): 199-204

Friedmann, Harriet. 2008. "Book Reviews. The Global Food Economy: The Battle for the Future of Farming - By Tony Weis". *Journal of Agrarian Change* 8(4), 618-623.

Center for Investigative Reporting. Food for 9 Billion.

<http://cironline.org/projects/food-9-billion>

Fraser, Evan. 2012. "Feeding 9 Billion People.

<http://www.youtube.com/watch?v=raSHAqV8K9c>

2. Friday, October 2

Undernourishment around the World

Patel, Raj. 2007. "Introduction." *Stuffed and Starved: From Farm to Fork the Hidden Battle for the World Food System*. London: Portobello Books: 9-27.

Economist. 2011. "The 9 Billion-People Question." 24 February.

<http://www.economist.com/node/18200618>

Recommended

Henry I. Miller and Drew L. Kershen. 2013. "Politics and the Poor Man's Plate."

Defining Ideas. <http://www.hoover.org/publications/defining-ideas/article/137641>

Economist. 2011. "How Much is Enough?" 24 February,

<http://www.economist.com/node/18200702>

Diamond, Jared. 2005. "Malthus in Africa: Rwanda's Genocide." *Collapse: How Societies Choose to Fail or Succeed*. New York: Penguin Books: 311-328.

3. Tuesday, October 6

Population Growth, Resource Scarcity, and Food Security

Collier, Paul. 2008. "The Politics of Hunger." *Foreign Affairs*, November/December.

Brown, Lester. 2011. "The New Geopolitics of Food." *Foreign Policy*. May/June, 2011.

Recommended

Weis, Tony. 2013. "The Meat of the Global Food Crisis." *Journal of Peasant Studies*, 40(1), 65-85.

Plumer, Brad. 2013. "This terrifying chart shows we're not growing enough food to feed the world." *Washington Post*, 1 July.

<http://www.washingtonpost.com/blogs/wonkblog/wp/2013/07/01/this-unsettling-chart-shows-were-not-growing-enough-food-to-feed-the-world/>

Bremner, Jason. 2012. "Population and Food Security: Africa's Challenge," Population Reference Bureau, Policy Brief, February.

Timmer, Peter. 2013. "Agricultural Transformation in Asia." *East Asia Forum*, January 25.

Timmer, Peter. 2010. "Reflections on Food Crises Past." *Food Policy*, 35, 1-11.

- Clapp, Jennifer. 2008. "A Global Outlook on Food Studies." *Food, Culture and Society* 11(3): 275-80.
- Mintz, Sidney. 2008. "Food, Culture, and Energy". In Alexander Nützenadel and Frank Trentmann (eds.) *Food and Globalization: Consumption, Markets and Politics in the Modern World*. Oxford: Berg Pub Ltd. Pp. 21-35.
- Yamashita, Kazuhito. 2020. "Will the COVID-19 Pandemic Cause a Food Crisis?" Japan Times. April 17.
<https://www.japantimes.co.jp/opinion/2020/04/17/commentary/japan-commentary/will-covid-19-pandemic-cause-food-crisis/>

4. Friday, October 9

Can Agro-Biotechnology Solve World Hunger?

- Gaud, W.S. 1968. "The Green Revolution: Accomplishments and Apprehensions." Speech given before the Society of International Development, Washington, D.C. Read on line: <http://www.agbioworld.org/biotech-info/topics/borlaug/borlaug-green.html>
- Borlaug, Norman. 2004 "Biotech Can Feed 8 Billion." *New Perspectives Quarterly* 24(4), 97-102.
- Rosset, Peter. 2005. "Transgenic Crops to Address Third World Hunger? A Critical Analysis". *Bulletin of Science, Technology & Society* 25(4), 306-13.
- Lawrence, F. 2016. "Agrichemicals and ever more intensive farming will not feed the world." *Guardian*, October 2.
https://www.theguardian.com/commentisfree/2016/oct/02/agrichemicals-intensive-farming-food-production-biodiversity?CMP=share_btn_fb

Recommended

- Patel. Raj. 2013. "The Long Green Revolution." *Journal of Peasant Studies* 40(1), 1-63.
- Pollack, Andrew. 2013. "Unease in Hawaii's Cornfields." *New York Times*. 7 October. <http://www.nytimes.com/2013/10/08/business/fight-over-genetically-altered-crops-flares-in-hawaii.html?hp&r=0&pagewanted=all>
- Evenson, R. E., Gollin, D., 2003. "Assessing the Impact of the Green Revolution, 1960 to 2000." *Science*, 5/2/2003, Vol. 300(5620).
- Borlaug, Norman E. 2000 "Ending World Hunger: the Promise of Biotechnology and the Threat of Anti-science Zealotry. *American Society of Plant Physiologists Plant Physiology* 124, 487-490.
- Pretty, Jules. 2002 *Agri-Culture: Reconnecting People, Land, & Agriculture*. London, Earthscan. (Pp 126-145; "Genetics Controversy")
- Altieri, Miguel A. 2004. *Genetic Engineering in Agriculture: The Myths, Environmental Risks, and Alternatives*. Second Edition. Oakland, FoodFirst Book.
- Clapp, Jennifer. 2005. "The Political Economy of Food Aid in an Era of Agricultural Biotechnology" *Global Governance* 11(4): 467-485.

5. Tuesday, October 13

The Role of Agriculture in Reducing Poverty and Hunger

Pretty, Jules. 2002. "Food for All." *Agri-Culture: Reconnecting People, Land, & Agriculture*. London, Earthscan: 78-101.

[Watch the short video](#)

Vandana Shiva *On The Problem With Genetically Modified Seeds*.

<http://justlabelit.org/vandana-shiva-on-the-problem-with-genetically-modified-seeds/>

Recommended

[Read the newspaper article to understand the organic farmers' movement](#)

Kuipers, Dean. "Organic farmers take on Monsanto over patent lawsuits." *Los Angeles Times*, February 17, 2012.

<http://articles.latimes.com/2012/feb/17/local/la-me-gs-organic-farmers-sue-monsanto-to-stop-patent-suits-20120217>

Shattuck, Annie and Eric Holt-Giménez. 2009. "Why the Lugar-Casey Global Food Security Act will Fail to Curb Hunger". *FoodFirst Policy Brief No. 18*.

http://www.foodfirst.org/files/pdf/PB_18_Lugar-Casey_Full_15Apr09.pdf

Kloppenborg, Jack. 2010. "Impeding Dispossession, Enabling Reposition: Biological Open Source and the Recovery of Seed Sovereignty." *Journal of Agrarian Change* 10(3): 367-388.

"Costa Rica farmers see value in biodiversity." June 10, 2013.

<http://cironline.org/reports/costa-rica-farmers-see-value-biodiversity-4705>

Chhabra, E. 2017. "Biodynamic farming is on the rise - but how effective is this alternative agricultural practice?" *Guardian*, March 5.

<https://www.theguardian.com/sustainable-business/2017/mar/05/biodynamic-farming-agriculture-organic-food-production-environment>

6. Friday, October 16

***** World Food Day 2020*****

[Film Screening](#)

Watch the powerful documentary film and write your reaction essay (4-500 words).

Food Inc. Watch free on your own on YouTube: <https://youtu.be/RV0RC-m9qBg>

7. Tuesday, October 20

Unpacking Your Lunch/Dinner

Students will make a brief report about what they had for lunch or dinner. What ingredients were used, where they were grown, and how far they traveled.

[Industrial Corn](#)

Pollan, Michael. 2006. *The Omnivore's Dilemma*. New York: Penguin: Chapters 1-2 (15-56).

8. Friday, October 23

[Industrial Corn](#)

Pollan, Michael. 2006. *The Omnivore's Dilemma*. New York: Penguin: Chapters 3-6 (57-99).

Recommended

Striffler, Steve. 2005. *Chicken: The Dangerous Transformation of America's Favorite Food*. New Haven: Yale University Press.

Kanis Dursin. 2013. "Putting Food Security on the Calendar." IPS, 29 March, <http://www.ipsnews.net/2013/03/putting-food-security-on-the-calendar/>

"Pepsi to drop artificial sweetener aspartame." BBC. April 27, 2015. <http://www.bbc.com/news/health-32478203>

9. Tuesday, October 27

Unpacking the World Food Economy

Clapp, Jennifer. 2012. "Unpacking the World Food Economy." In *Food*. Cambridge: Polity Press: 1-23.

Recommended

Weis, Tony. 2007. *The Global Food Economy: The Battle for the Future of Farming*. London: Zed Books. Pp. 1-46 ("Preface" and "The Global Food Economy: Contradictions and Crises").

McMichael, Phillip 2000. "The Food Regime and the Changing Division of World Labor". In *Development and Social Change: A Global Perspective*. 2nd edition. Pine Forge Press. Pp. 59-76.

10. Friday, October 30

Global Food Market

Clapp, Jennifer. 2012. "The Rise of a Global Industrial Food Market." In *Food*. Cambridge: Polity Press: 24-56.

Recommended

NYT. 2016. "ChemChina Deal for Syngenta Reflects Drive to Meet Food Needs." *New York Times* Feb. 3.

Weis, Tony. 2007. "The Temperate Grain-Livestock Complex". In *The Global Food Economy: The Battle for the Future of Farming*. London: Zed Books. Pp. 47-88.

Watts, Michael. 2004. "Are Hogs Like Chickens? Enclosure and Mechanization in two 'White Meat' Filières." In Alex Hughes and Suzanne Reimer eds. *Geographies of Commodity Chains*. London: Routledge. Pp. 39-62.

Watts, Michael. 2007. "Agro-Food Systems". In *The Dictionary of Human Geography*. 4th Edition. Ronald John Johnston, Derek Gregory, Geraldine Pratt and Michael Watts (Eds). Malden: Wiley-Blackwell. Pp. 15-17.

II. International Policy Arena

11. Friday, November 6

The Impact of the WTO on the Environment and Agriculture

Clapp, Jennifer. 2012. "Uneven Agricultural Trade Rules." In *Food*. Cambridge: Polity Press: 57-89.

Recommended

Weis, Tony. 2007. *The Global Food Economy: The Battle for the Future of Farming*. London: Zed Books. (Pp. 128-160 "Entrenching an Uneven Playing Field; the Multilateral Regulation on Agriculture").

Blandford, David and David Orden. 2008. "United States: Shadow WTO Agricultural Domestic Support Notifications" *IFPRI Discussion Papers*. 00821/2008. Pp. 1-44.

12. Tuesday, November 10

*****Creating References for Analytical Paper*****

Group work: your group will search articles, books, and online resources on Japanese food and agriculture, and create a list of useful references. Collect and select references that are most relevant to your group research. Each group will submit summary of discussion points in your group and the lists of references via email by 6:45pm.

13. Friday, November 13

Transnational Corporations in Global Food Market

Clapp, Jennifer. 2012. "Transnational Corporations." In *Food*. Cambridge: Polity Press: 90-124.

Guardian. 2020. "Revealed: Development Banks Funding Industrial Livestock Farms Around the World." Guardian July 2:
<https://www.theguardian.com/environment/2020/jul/02/revealed-development-banks-funding-industrial-livestock-farms-around-the-world?fbclid=IwAR2YF3m9dikjROrtGdJZZlxj4br6TSpiKDbXz5ZiOjKyxcKf3y1ROJhliEg>

Suggested

Jennifer Clapp and Doris Fuchs. 2009. "Agrifood Corporation, Global Governance, and Sustainability: A Framework for Analysis." In Jennifer Clapp and Doris Fuchs eds. *Corporate Power in Global Agr-food Governance*. Cambridge: MIT Press. Pp. 1-15.

Nestle, Marion. 2004. "Food Politics: How the Food Industry Influences Nutrition and Health". *Sustainable Agriculture and Food: Volume III Agriculture and Food Systems*. Jules Pretty. London, Earthscan (Pp. 314-339)

Whatmore, Sarah. 2002. "From Farming to Agribusiness: Global Agri-food Networks". In Johnston, R. J., Taylor, P. J. and Watts, M. J. (eds) *Geographies of Global Change: Remapping the World*. Oxford: Blackwell. Pp. 57-67.

Gillis, J. and N. Fleur. 2015. "Global Companies Joining Climate Change Efforts." NYT. September, 23.

14. Tuesday, November 17

Food and Agriculture in The World Trade Organization

Rosset, Peter. 2006. "Intro: Trade versus Development?" and "Trade Negotiations and Trade Liberalization." *Food is Different: Why We Must Get the WTO Out of Agriculture*. London: Zed Books: 1-24.

Recommended

Peets, Richard. 2009. *Unholy Trinity. The IMF, World Bank and WTO. Second Edition*. London, Zed Book. Pp. 178-243 ("The World Trade Organization").

The Uruguay Round, GATT. 1994. "Summary of Agreement on Agriculture."
http://www.wto.org/english/docs_e/legal_e/ursum_e.htm#aAgreement

15. Friday, November 20

*****Finding and Analyzing Data*****

Assignment: Find interesting data about food trade and its environmental impacts between countries that you're studying. Then, write one paragraph (200 words) about why the data you've found are worthy of and useful for research. You can choose three kinds of data.

III. Broken Food Systems

16. Tuesday, November 24

Key Issues in Current Trade Negotiations

Rosset, Peter. 2006. *Food is Different: Why We Must Get the WTO Out of Agriculture*. London: Zed Books: 25-51.

Recommended

Oxfam. 2002. *Rigged Rules and Double Standards: Trade, Globalization, and the Fight against Poverty*.

Conca, Ken. 2000. "The WTO and the Undermining of Global Environmental Governance." *Review of International Political Economy* 7(3), 484-494.

17. Friday, November 27

The Impact of the WTO on the Environment and Agriculture

Rosset, Peter M. 2006. "The Impacts of Liberalized Agricultural Trade." *Food is Different: Why We Must Get the WTO Out of Agriculture* London: Zed Books: 52-67.

Van der Zee, B. 2017. "Calls to reform food system: 'Factory farming belongs in a museum.'" *Guardian*, May 27.

https://www.theguardian.com/environment/2017/may/24/calls-to-reform-food-system-factory-farming-belongs-in-a-museum?CMP=share_btn_fb

Recommended

McMichael, Philip. 2000. "Sleepless since Seattle: What Is the WTO about?" *Review of International Political Economy* 7(3): 466-474.

Clapp, Jennifer. 2006. "WTO Agriculture Negotiations: Implications for the Global South." *Third World Quarterly* 27(4): 563-577.

18. Tuesday, December 1

Film Screening

Watch the powerful documentary film and write your reaction essay (4-500 words).

Artifishal: The Fight to Save Wild Salmon (2019) Watch the full movie on

Youtube: <https://youtu.be/XdNJOJAwT7I>

19. Friday, December 4

Salmon Aquaculture

Vidal, J. 2017. "Salmon farming in crisis: 'We are seeing a chemical arms race in the seas.'" *Guardian*, April 1.

https://www.theguardian.com/environment/2017/apr/01/is-farming-salmon-bad-for-the-environment?CMP=fb_gu

Kolmes, S. 2004. "Salmon Farms and Hatcheries." *Environment: Science and Policy for Sustainable Development*: pp. 40-43.

Vanden Heuvel and Julius. 2020. "Snake River Dams in Hot Water." *Seattle Times* June 29, <https://www.seattletimes.com/opinion/snake-river-dams-in-hot-water/>

20. Tuesday, December 8

***** Student Presentations*****

Corn

21. Friday, December 11

***** Student Presentations*****

Livestock

22. Tuesday, December 15

***** Student Presentations*****

Salmon

23. Friday, December 18

***** Student Presentations*****

Palm oil

24. Tuesday, December 22

***** Student Presentations*****

Sugar

25. Friday, January 8

Fixing Broken Food Systems

Rosset, Peter M. 2006. "Alternatives for a Different Agriculture and Food System" and "Conclusion: Another food System is Possible." *Food is Different: Why We Must Get the WTO Out of Agriculture* London: Zed Books: 68-80.

Recommended

- Oxfam. 2013. "Food For All." Oxfam Fact Sheet, May.
- Kanis Dursin. 2012. "Cultivating Food Security in Their Own Backyards." IPS 31 May. <http://www.ipsnews.net/2012/05/cultivating-food-security-in-their-own-backyards/>
- Holt-Gimenez, Eric and Annie Shattuck. 2011. "Food Crises, Food Regimes and Food Movements: Rumbblings of Reform or Tides of Transformation?" *Journal of Peasant Studies*, 38(1): 109-144.
- Eric Holt-Gimenez. 2008. "From Food Rebellion to Food Sovereignty - Urgent Call to Fix a Broken Food System". *FoodFirst Backgrounder* 14(1): 1-6.
- Patel, Raj and Phillip McMichael. 2009. "A Political Economy of the Food Riot." *REVIEW* 32(1):9-35.
- McMichael, Philip. 2009. "The World Food Crisis in Historical Perspective." *Monthly Review* 61(3).
- Magdoff, Fred and Tokar, Brian. 2009. "Agriculture and Food in Crisis: An Overview." *Monthly Review* 61(3), 1-27.

26. Tuesday, January 12

Fixing Broken Food Systems

- Patel, Raj. 2011. "Can the World Feed 10 Billion People." *Foreign Policy*, 4 May.
- Pretty et al. 2010. "Food Security: The Challenge of Feeding 9 Billion People." *Science* 327.
- Pearce, Fred. 2018. "Can the World Find Solutions to the Nitrogen Pollution Crisis?" *Yale Environment* 360. <http://e360.yale.edu/features/can-the-world-find-solutions-to-the-nitrogen-pollution-crisis>

Recommended

- IPBES (2019) "Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services." S. Díaz, J. Settele, E. S. Brondízio E.S., H. T. Ngo, M. Guèze, J. Agard, A. Arneth, P. Balvanera, K. A. Brauman, S. H. M. Butchart, K. M. A. Chan, L. A. Garibaldi, K. Ichii, J. Liu, S. M. Subramanian, G. F. Midgley, P. Miloslavich, Z. Molnár, D. Obura, A. Pfaff, S. Polasky, A. Purvis, J. Razzaque, B. Reyers, R. Roy Chowdhury, Y. J. Shin, I. J. Visseren-Hamakers, K. J. Willis, and C. N. Zayas (eds.). IPBES secretariat, Bonn, Germany. 56 pages. <https://doi.org/10.5281/zenodo.3553579>

27. Tuesday, January 19

Back-up Session

28. Friday, January 22

*****Analytic Paper Due*****