Title of Course: The Economics of Food

Instructor: Maria J. Bustamante, PhD

Course description:

As a basic tenet of life, everyone has a relationship with and is affected by food. The agriculture and food (agrifood) sector is a complex system influenced by market economics, culture and politics - all of which are constantly evolving. As our planet faces unprecedented environmental and political challenges, food has been raised as a central issue and interest in the sector is on the rise. The goal of this course is to introduce students to the economic, social and political perspectives on food system transformation within the Swedish context. By taking an ecosystem perspective and understanding key interrelationships, students will be encouraged to analyze and problematize Swedish food production and consumption in a way that integrates economic, cultural, environmental and ethical considerations.

In this course we will use key economic principles, such as supply and demand, subjectivity, efficiency, competition, and incentives, as a foundation to examine food production and consumption in Sweden – now and in the future. By first understanding the role of market actors, policy and individual choice, the overall aim of this course is to broaden the students' knowledge of the critical issues and trade-offs of the potential pathways to support more sustainable food production and consumption.

The course is divided into three main modules: 1) Perspectives on agrifood, 2) Examining sustainability in the agrifood system context and 3) The future of agrifood.

Prerequisite: an introductory course in Microeconomics and/or Macroeconomics

Intended Learning Outcomes

After completing the course, students should be able to:

- Demonstrate knowledge of different perspectives on agrifood systems presented in the course and how they relate to each other, broadly and specifically in the Swedish context
- Apply economic principles to analyze food systems dynamics at different levels
- Understand how national, regional and global policies and culture affect Swedish agrifood development
- Assess the roles and market power of the various stakeholders in the agrifood sector
- Critically reflect on the complexity and potential contradictions as it relates to food systems transformation towards sustainability

Course Literature

During the course, we will draw on a variety of literature sources. We will read several chapters from the following books:

- *Masters, W. A., & Finaret, A. B. (2024). Food Economics: Agriculture, Nutrition, and Health. Springer Nature. This book is available open source: https://library.oapen.org/handle/20.500.12657/90424*

- *Lang, T., & Heasman, M. (2015). Food wars: the global battle for mouths, minds and markets. Routledge. 2nd edition.*

All additional readings will be available on the course web.

Classroom expectations

Students are expected to prepare for class in advance by completing all readings and come to sessions with their own questions and reflections. The classroom should be seen as an open and safe environment where ideas can be expressed and debated in a respectful and thoughtful manner. As we aim to connect the dots between the course literature and practical application, please bring your own thoughts and experiences to the discussion.

Laptops and phones: Phones are not allowed during active class time (there will be breaks where you may check your phone). Laptops are highly discouraged but are allowed for notetaking if that is the preferred method of the student. However, if students are found to be distracted or disengaged due to laptop use, participation grades will be affected negatively. Please reflect on this. If you are easily distracted with your laptop open, it is strongly suggested to take notes with pen and paper.

Class attendance: Regular attendance is mandatory. One absence is allowed without penalty. Any additional absences must be excused by the instructor. We have one guest lecture planned, and one study visit planned during the semester. Attendance at these sessions is mandatory. Failure to attend these sessions will result in an automatic reduction of grade (unless an emergency is documented). The course instructor reserves the right to assign make-up assignments for missed classes.

Class participation: Class participation is assessed based on overall engagement during class time, e.g. are you listening, asking questions, etc. It is not the "quantity" of participation that matters, but its quality. The course will offer different ways to share ideas within class. If you feel you are facing any barriers or concerned about your participation, please contact the course instructor.

Academic integrity and plagiarism: All written assignments are expected to be independent and self-authored. Any use of concepts, ideas or figures from other materials should be properly referenced according to academic standards. Plagiarism of any kind is strictly forbidden. This includes any use of AI to assist in writing as well. If you use AI to assist you, you are required to submit a summary describing how you used AI to help you complete the assignment (e.g. producing text, proofreading, finding citations, etc.). In addition, you must clearly indicate which passages have been produced or assisted by AI, for example in a footnote that details how AI was used in that instance. Failure to acknowledge use of AI to complete an assignment will count as academic dishonesty and be subject to the same penalties as outright plagiarism or other forms of cheating. Please review the Plagiarism and AI policy in the Student Handbook.

Grading
Your final grade will be based on the summation of points from the following:

Graded activity	***Points***
Class attendance and participation	10
Literature presentation	10
Small assignments (2 x 6 pts)	12
Mid-term presentation	20
Research Project - Draft (10 pts) - Peer Review (8 pts) - Final Report (30 pts)	48
Total	***100 points***

A = 90-100 pts, B = 80-89 pts, C = 70-79 pts, D = 65 – 69 pts, F = 64 or fewer points

Class attendance and participation (Individual): please see Classroom expectations above.

Literature presentation (1, groups of 2-3) During one session of the semester, you and a classmate(s) will be assigned to present the assigned literature for that session. The goal is to reinforce learning in an engaging and creative way. Thus, the "presentations" do not need to follow a template but should be between 10-15 minutes. More details will be provided on expectations and grading criteria.

Small Assignments (2, individual): During the semester you will be required to submit two smaller assignments of 500-750 words each. The first one is due after the completion of the first module, and the second will be due after the completion of the second module. More details will be provided.

Mid-term presentation (groups of 2): Based on a specific case, you will evaluate and present a solution from the viewpoint of a specific stakeholder in the Swedish agrifood system. This will be done in pairs. Case materials, pairings and more details on the expectations and evaluations of the presentations will be provided.

Research Project (individual): Throughout the semester you will conduct an individual research project on an aspect of the Swedish agrifood system that interests you (e.g. production, policy, consumer habits). It should be an in-depth study that incorporates the course literature, along with additional sources that support your overall research question. You should also interview at least one person that can provide insight into the area you are researching. To help develop your report, you will be required to submit some research tasks throughout the semester. These include:

- Submission 1 (ungraded): 1-3 topic areas of interest and potential research questions
- Submission 2 (graded): A draft of your report, 1000-1500 words, excluding references
- Peer Review (graded): You will read two of your classmates' drafts and provide short written feedback, as well as participate in a discussion. More details will be provided.
- Submission 3 (graded): Final reports should be approximately 3000 words in length, excluding references. Academic referencing is required. You will be given more details and guidelines for the structure and format of the final paper, as well as the grading criteria.

Course Schedule

(Please note: The syllabus is subject to minor changes (e.g. readings, activities). Please always check Google Classroom for the most up-to-date information once the course has started.)

Session 1: Introduction to the course
Main topics:
- Introduction to the course and main themes
- Getting to know each other
- Course practicalities and expectations
- High-level overview: The current situation of agrifood, health, the environment, and market drivers in Sweden

Prior to the session

Read:
- Chapter 2: The Food Wars thesis in *Lang, T., & Heasman, M. (2015). Food wars: the global battle for mouths, minds and markets. Routledge. 2nd edition.*

- Executive Summary in Ruggeri Laderchi, C., et al. (2024). The Economics of the Food System Transformation. Food System Economics Commission (FSEC), Global Policy Report.

- Why are kiwis so cheap? (p. xv – xvi) in *Masters, W. A., & Finaret, A. B. (2024). Food Economics: Agriculture, Nutrition, and Health. Springer Nature.*

MODULE 1: PERSPECTIVES ON AGRIFOOD
During weeks 2-4, we will focus on analyzing agrifood in Sweden from different perspectives. Readings for each week give you a foundation for in-class discussions where we will apply the concepts and themes to the Swedish context.

Session 2: The market economy and food
Main topics and activities:
- Actors and power
- Externalities and market failures
- Competition in the EU
- Literature presentation (*pre-assigned*)
- Discussion of final project ideas

Prior to the session

Read:
- Chapter 6, The Food Wars Business (pg.168-195 only) in *Lang, T., & Heasman, M. (2015). Food wars: the global battle for mouths, minds and markets. Routledge. 2nd edition.*

- Chapter 11, Section 11.1 How Trade and Policies Link Local Markets and Global Food Systems in *Masters, W. A., & Finaret, A. B. (2024). Food Economics: Agriculture, Nutrition, and Health. Springer Nature.*

- Chapter 4, Section 4.2 Externalities: Unintended Side Effects of Market Activity in *Masters, W. A., & Finaret, A. B. (2024). Food Economics: Agriculture, Nutrition, and Health. Springer Nature.*

- Wilhelmsson, F. (2006). Market power and European competition in the Swedish food industry. *Journal of Agricultural & Food Industrial Organization*, *4*(1).

Other:
- Submit project ideas and initial research questions

Session 3: Health, culture and food
Main topics:
- Dietary norms and food preferences
- Using behavioral economics to understand non-optimizing aspects of food
- Socio-economic factors of food
- Literature presentation (*pre-assigned*)
- Introduction of Mid-term assignment

Prior to the session

Read:
- Chapter 8, Section 8.1: Behavioral Economics of Food Choices for Future Health in *Masters, W. A., & Finaret, A. B. (2024). Food Economics: Agriculture, Nutrition, and Health. Springer Nature.*

- Chapter 3, Diet, Health and Disease (pgs. 58-76 only) in in *Lang, T., & Heasman, M. (2015). Food wars: the global battle for mouths, minds and markets. Routledge. 2nd edition.*

- Rydén, P. J., & Hagfors, L. (2011). Diet cost, diet quality and socio-economic position: how are they related and what contributes to differences in diet costs?. *Public health nutrition*, *14*(9), 1680-1692.

- Section 4: Diet quality and health in Jonell, M., Alvstad, R., Eitrem Holmgren, K., Bengtsson, J., Fetzer, I., Gordon, L. J., ... & Wood, A. (2024). Climate, biodiversity and dietary quality targets for Swedish food production and consumption. *Mistra Food Futures Report*, (20).

Session 4: Policy and food
Main topics:
- Political economy and the welfare state
- Government policies and interventions
- The Swedish Food Strategy
- Literature presentation (*pre-assigned*)
- Oxford Debate: Food Policy Intervention – to tax or not to tax?

Prior to the session

Read:
- Chapter 6: Collective Action: Government Policies and Program in *Masters, W. A., & Finaret, A. B. (2024). Food Economics: Agriculture, Nutrition, and Health. Springer Nature.*

- Chapter 8: Food Democracy or Food Control in *Lang, T., & Heasman, M. (2015). Food wars: the global battle for mouths, minds and markets. Routledge. 2nd edition.*

- Lundborg, P., Rooth, D. O., & Alex-Petersen, J. (2022). Long-term effects of childhood nutrition: evidence from a school lunch reform. *The Review of Economic Studies*, *89*(2), 876-908.

Other:
- During class we will conduct an Oxford style debate where you will be assigned to argue either for or against a specific policy intervention: a meat tax. To prepare for this debate, please read:
    - Säll, S. (2018). Environmental food taxes and inequalities: Simulation of a meat tax in Sweden. *Food Policy*, *74*, 147-153.

- You will have time during class to prepare for the debate as a team and are encouraged to think about the three perspectives on food and agriculture that we have explored thus far to build your arguments. *Note: you will not know before class which side you will represent.*

MODULE 2: EXAMINING SUSTAINABILITY IN THE AGRIFOOD SYSTEM CONTEXT
During weeks 5- 9, we will deep dive into the questions surrounding sustainability in the agrifood system. Drawing upon the different perspectives explored in Module 1, this module will build your knowledge on the complexity and trade-offs of increasing sustainability in the sector. Included in this module are the Mid-term presentations and a study visit.

Session 5: What is sustainable food production and consumption?
Main topics:
- Environmental consequences of agrifood
- Planetary boundaries
- Supply and demand consumption patterns and effects on nature
- Literature presentation (*pre-assigned*)

Prior to the session

Readings
- Chapter 4: Food, environment and sustainability in *Lang, T., & Heasman, M. (2015). Food wars: the global battle for mouths, minds and markets. Routledge. 2nd edition.*

- Gerten, D., Heck, V., Jägermeyr, J., Bodirsky, B. L., Fetzer, I., Jalava, M., ... & Schellnhuber, H. J. (2020). Feeding ten billion people is possible within four terrestrial planetary boundaries. *Nature Sustainability*, *3*(3), 200-208.

- Bunge, A. C., Mazac, R., Clark, M., Wood, A., & Gordon, L. (2024). Sustainability benefits of transitioning from current diets to plant-based alternatives or whole-food diets in Sweden. *nature communications*, *15*(1), 951.

Other:
- Submit Assignment 1

Session 6: Mid-term Presentations
Main topics:
- Mid-term presentations
- Mid-term check-in/evaluation

Prior to the session

Read:
- No readings

Other:
- Submit Midterm PPT

Session 7: Food systems transformation
Main topics:
- Economics of innovation
- Socio-technical transitions and the multi-level perspective
- Diet transitions and the politics of choice
- Ethics and just transitions
- Literature presentation (*pre-assigned*)

Prior to the session

Read:
- Chapter 12: The Future of Food: Meeting Human Needs with Systemic Change in Food Economics in *Masters, W. A., & Finaret, A. B. (2024). Food Economics: Agriculture, Nutrition, and Health. Springer Nature.*

- Mylan, J., Morris, C., Beech, E., & Geels, F. W. (2019). Rage against the regime: Niche-regime interactions in the societal embedding of plant-based milk. *Environmental Innovation and Societal Transitions*, *31*, 233-247.

- Röös, E., et al. (2021). Policy options for sustainable food consumption: Review and recommendations for Sweden

- Hansson, H., Säll, S., Abouhatab, A., Ahlgren, S., Berggren, Å., Hallström, E., ... & Zhu, L. H. (2024). An indicator framework to guide food system sustainability transition–The case of Sweden. *Environmental and Sustainability Indicators*, *22*, 100403.

Session 8: Study Visit to Sopköket
Main topics:
- Hands-on study visit
- Food waste & upcycling

Prior to the session

Read:

- Good Examples from Sweden on Reducing Food Waste. Swedish Environmental Protection Agency. 2021

- Report summaries from the Swedish government commission to reduce food loss and waste 2017- 2019. The Swedish Food Agency. 2020.

Other
- Submit draft report.

Session 9: How do other food system goals affect sustainability?
Main topics:
- Food resiliency & preparedness
- Food justice
- Competitiveness
- Literature presentation (*pre-assigned*)
- Peer review groups: Drafts of final projects

Prior to the session

Read:

- Alvstad, R., Jonell, M., & Lindahl, T. (2024). Synergies and trade-offs between crisis preparedness and environmental sustainability of school meals in Sweden. *Mistra Food Futures Report*, (22).

- Öhlund, E., Hammer, M., & Björklund, J. (2017). Managing conflicting goals in pig farming: farmers' strategies and perspectives on sustainable pig farming in Sweden. *International Journal of Agricultural Sustainability*, *15*(6), 693-707.

- Tribaldos, T., & Kortetmäki, T. (2022). Just transition principles and criteria for food systems and beyond. *Environmental Innovation and Societal Transitions*, *43*, 244-256.

Other:
- Submit your peer review of your assigned project drafts.

MODULE 3: THE FUTURE OF AGRIFOOD
During weeks 10 – 12 we turn to the future of the agrifood industry and reflect on how it will be shaped by different stakeholders, policies and cultural developments.

Session 10: Where and how will food be produced in the future?
Main topics:
- Urban and rural food systems
- The role of innovation and technology

- The role of policy
- Literature presentation (*pre-assigned*)

Prior to the session

- Shellabarger, R. M., Voss, R. C., Egerer, M., & Chiang, S. N. (2019). Challenging the urban–rural dichotomy in agri-food systems. *Agriculture and Human Values*, *36*(1), 91-103.

- Opitz, I., Berges, R., Piorr, A., & Krikser, T. (2016). Contributing to food security in urban areas: differences between urban agriculture and peri-urban agriculture in the Global North. *Agriculture and Human Values*, *33*, 341-358.

- Finger, R. (2023). Digital innovations for sustainable and resilient agricultural systems. *European Review of Agricultural Economics*, *50*(4), 1277-1309.

- Introduction & Chapter 1 in *A Taste of Foodtech*. Report by Axel Johnson. 2023

Other:
- Submit Assignment 2.

Session 11: Food future narratives and their material and political dimensions
Guest Lecturer: Helena Fornstedt, Associate Professor, Mälardalen University
Main topics:
- Role of food science and food technology in shaping visions for future food
- How different food system stakeholders use narratives to shape market development
- Sustainable protein in Sweden as a case
- Time for last questions on Final projects

Prior to the Session

Read:
- Jasanoff, S. (2015). Chapter 1: Future imperfect: Science, technology, and the imaginations of modernity. In *Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power*, 1-33.

- Gordon, L. J., Eitrem Holmgren, K., Bengtsson, J., Persson, U. M., Peterson, G. D., Röös, E., ... & Fetzer, I. (2022). *Food as Industry, Food Tech or Culture, or even Food Forgotten?: A report on scenario skeletons of Swedish Food Futures* (No. 1). *Note: You do not need to read Sect. 3: Method*

Session 12: So, who/what decides the future of food? Final course discussion and wrap-up.
Main topics:
- Market power and food system stakeholders
- The Swedish Food Strategy (revisited)
- Course evaluations

Read:

- Finger, R., Fabry, A., Kammer, M., Candel, J., Dalhaus, T., & Meemken, E. M. (2024). Farmer Protests in Europe 2023–2024. *EuroChoices*, *23*(3), 59-63.

- Chapter 9: The future in *Lang, T., & Heasman, M. (2015). Food wars: the global battle for mouths, minds and markets. Routledge. 2nd edition.*

- Epilogue: The Price of Kiwifruit, Explained in *Masters, W. A., & Finaret, A. B. (2024). Food Economics: Agriculture, Nutrition, and Health. Springer Nature.*

EXAM WEEK: Final Research Reports Due