

Nutrition, Food Security and Development

Nutrition 304

(3 semester hour units)

Fall 2021

Tuesdays 2-5 PM, Jaharis 118

Instructor:

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Introduction

Welcome! We look forward to engaging in thought-provoking exchanges and mutual learning with you this semester. Together we will tackle critical, evidence-driven analyses of effective government policy responses to food security and nutrition challenges in low- and middle-income countries. Through lecture, discussion, case studies, and secondary data analysis, by the end of the semester you will be able to: discuss the range of policy levers that are used to enact national food security policy in low- and middle-income countries; describe evidence of the effectiveness of these policies and programs in improving food insecurity, poverty, and malnutrition in different contexts; analyze key sources of food and socio-economic data to understand and inform policy-relevant decisions; and produce reasoned and critical writing to influence critical policy debates.

Goals of the Course

1. Know the rationale and objectives of national and international food policy, and how food policy complements nutrition and agricultural policy.
2. Understand the range of policy levers that are used to enact food policy and how these policies and programs directly or indirectly affect food security, poverty, and nutrition.
3. Learn the pre-conditions for successful use of these policy levers and the contextual elements that must be considered in tailoring policy interventions for target populations.
4. Know elements of political economy analysis and economic theory to explain and predict government actions and their outcomes.
5. Weigh the pros and cons of indicators for measuring the effectiveness of food policies
6. Analyze key data sources (food balance data, food price data, household consumption and expenditure data, dietary data) to discern food system trends and serve as the basis for policy formulation.

You will also develop competency in the following skill areas:

1. Measurement and construction of key indicators for use in policy analysis
2. Methods for using data analysis and visualization for policy decision-making
3. Reasoned and critical writing for influencing key policy debates

Course Prerequisites

Nut 203 and Nut 238 or equivalent

Office Hours

Dr. Coates (Jennie) and the course TA, Dr. Bell (Winnie), will each have a dedicated time block during the week where we will be available to meet with you. Jennie will be available on Tuesdays directly after the class session until 6 PM EST and by appointment via Zoom. Winnie will be available on Tuesdays from 11-12 PM EST in Jaharis 243 and by appointment via Zoom. Her office hours are informal so please feel free to drop in with your questions or just to say hello. If you would like to discuss a topic or interests in more detail, please email to arrange a 1:1 appointment.

You are welcome, though not required, to join office hours with Jennie and/or Winnie. This is a good opportunity to introduce yourself and your background in more detail, and discuss your career interests, any questions you may have about the class, your career trajectory, navigating life at Friedman, etc. Asking questions when you are confused is an important aspect of the learning process, so we welcome your questions. If you are unable to meet with us during office hours, you are welcome to get in touch to set up an alternative time to talk. Please email *both* Jennie and Winnie with any questions about grading, assignments, absences, suggestions, preparation for class, etc.

Logistics

The plan is to meet in person in Jaharis 118 every Tuesday. Students with extenuating circumstances that prevent them from being on campus this semester *and who received prior permission from the Academic Dean* will join the class via Zoom. We reserve the right to modify the course modality (e.g., instructor on Zoom, TA and students in the classroom, fully remote, or some other configuration) if COVID-related circumstances warrant such a change.

We will use Canvas as the course operational hub. We will send all communication either via Canvas email or posted as an announcement on the site. Each week's content is structured as a separate module, and we will use the course discussion board for our discussion forum. Assignments should be submitted to Canvas, and we will return them to you through Canvas as well.

All lectures will be recorded and posted after class to the Canvas site. At the beginning of each lecture, we will remind everyone before we start the recording.

Weekly Routine

The table below describes the weekly routine that we will follow throughout the semester. The routine incorporates both student and instructor processes and deadlines, so that everyone can structure their time accordingly.

	Monday	Tuesday	Wednesday	Thursday	Friday
Student Processes and Deadlines	<ul style="list-style-type: none"> Submit initial response to discussion board prompts by 11:59 PM EST. 	<ul style="list-style-type: none"> Complete class preparation by 2 PM EST Attend class (2-5 PM EST) 	<ul style="list-style-type: none"> Read and reply to your peers' posts to the discussion board (from Monday). Replies due by 11:59 PM EST Submit assignments, per the syllabus, before 11:59 PM EST 	<ul style="list-style-type: none"> From Thur-Mon, read the instructors' highlights and focus questions for the upcoming module. Read the discussion board prompts. Start on the required readings, take notes, and begin to formulate responses to the discussion board. 	<ul style="list-style-type: none"> Continue required readings, discussion board responses, and/or assignments as relevant
Instructor Processes	<ul style="list-style-type: none"> Prepare class materials for Tuesday Read the discussion board posts and clarify, correct, or ask questions, as appropriate. 	<ul style="list-style-type: none"> Hold office hours from 11-12 PM EST (Winnie) in Jaharis 243 Post lecture PowerPoint slides by 2 PM EST Lead class (2-5 PM EST) Hold office hours from 5-6 PM EST (Jennie) Post lecture recording on Canvas 	<ul style="list-style-type: none"> Read the discussion board peer response posts and clarify, correct, or ask questions, as appropriate. 	<ul style="list-style-type: none"> Post highlights and focus questions for the upcoming module. Post discussion board prompts. 	<ul style="list-style-type: none"> Grade assignments and discussion posts as needed. We strive to return assignments within two weeks of submission.

Assessments and Expectations

1. Class Participation and Discussion Forum (15%)

This course is designed to be one-part lecture and one-part lively discussion in a seminar-style setting, along with dynamic case study challenges that require synthetic understanding of the course preparatory materials. As such, we expect you to complete the readings for each class beforehand, attend class, and participate in class discussions. We offer other opportunities for participation, including through the online discussion forum (see below).

To complement our real-time interactions and extend and deepen our learning around the issues covered in Nut 304 this semester, we will engage in a **weekly discussion forum on Canvas**. Winnie and I will pose a series of questions every Thursday that pertain to the following week's class. Per the weekly schedule above, you will be asked to engage in the discussion by responding to the original questions and replying to others' posts. The objectives of the discussion forum are to develop a practice of engaged, critical reading, watching, and listening; synthesize course concepts to apply in broader context; practice opinion-based communication; raise key concepts and questions from the preparatory materials in advance of the lecture for in-person discussion; interact with colleagues to develop class camaraderie; and increase equity of access to learning. We offer the flexibility for you to opt out of one week of the discussion forum without penalty, and we will not hold a discussion forum during weeks that assignments are due.

2. Assignment 1 & 2: Data Analyses Exercises (40%)

One of the skills that the class aims to develop is your ability to understand the measurement, construction, and use of key indicators and apply them in policy analysis. The process of indicator construction will also facilitate your understanding of the strengths and weaknesses of these measures. To this end, there will be two homework assignments requiring you to 1) construct, analyze, and interpret a country's food system trends relative to prevalence of undernourishment and other food security indicators, 2) analyze and interpret food price trends in association with food system patterns and measures of health and well-being. These assignments are tied to the content of the course lectures.

3. Policy Memo (15%)

For this assignment, you will be required to prepare a synthetic policy memo tied to one of the course weeks/topics. In this memo, you will describe a policy-relevant problem set in a specific real-world context, present a set of policy options along with the pros and cons of these alternatives, and justify your recommendations for pursuing one of the options from among the range of possibilities. The policy memo should be informed by the case study challenge, the class discussions and your own opinions on the topic at hand. We will have you sign up for your preferred topic toward the beginning of the semester.

The memo is due two weeks after the class topic that the student has chosen to write about. For instance, say you choose to write a policy memo staking a position on a particular social protection policy challenge in Egypt. If the social protection class were held on October 1, then the policy memo would be due by October 15. As the memos are submitted on a rolling basis, we will grade all the memos at two points throughout the semester – at the mid-point and just after the last week of classes.

4. Country Strategy Term Paper (30%)

The semester will culminate in a final policy term paper. You will work individually to identify one low- or middle-income country affected by the food price crises in 2008 and critique its food policies in response to that crisis, with special attention to the appropriateness of that type of policy response to current COVID-19 pandemic-related challenges. ***The term paper is due by 11:59 PM EST on Sunday December 19.***

Grading System

Component or Assignment	Percentage
In-class participation and discussion forum	15
Policy memo	15
Data analysis exercise 1	20
Data analysis exercise 2	20
Term paper	30
Total	100

Grading Range

A passing grade in the course is B- or better. Course grades will be based on the ranges below (subject to revision during the course):

A	>= 94%
A-	90 - <94%
B+	87 - <90%
B	84 - <87%
B-	80 - <84%

Accommodations of Disabilities

Tufts University is committed to providing equal access and support to all students through the provision of reasonable accommodations so that each student may access their curricula and achieve their personal and academic potential. If you have a disability that requires reasonable accommodations, please contact the Friedman School Assistant Dean of Student Affairs at 617-636-6719 to make arrangements for determination of appropriate accommodations. Please be aware that accommodations cannot be enacted retroactively, making timeliness a critical aspect for their provision.

Academic Conduct

You are responsible for upholding the highest standards of academic integrity, as specified in the Friedman School's Policies and Procedures manual (<http://nutrition.tufts.edu/student/documents>) and Tufts University policies (<http://students.tufts.edu/student-affairs/student-code-conduct/academic-integrity-policy>). It is everyone's responsibility to know what constitutes plagiarism, do your own work, and respect the work of others, as violations will be sanctioned by penalties ranging from grade reduction or failure on an assignment or the course to dismissal from the school. If you are struggling with how to avoid plagiarism, please be in touch with Jennie or Winnie (in advance of submitting an assignment) and we will provide additional resources for learning correct approaches to attribution.

Late Policy

Assignments must be submitted on or before the due date. We understand that there are occasionally compelling circumstances when an extension might be needed. If you think you will need an extension, please contact Jennie and Winnie with your request in advance of the deadline to have the extension request approved. (Having a lot of other work in other classes is not usually considered an extraordinary circumstance). Each assignment submitted up to two days late without prior approval will be docked 2 points. Assignments submitted more than 2 days past the deadline without prior approval will be docked a total of 4 points.

Anti-Racism, Equity, and Inclusion

The power structures that have created persistent global inequities and entrenched development challenges are often rooted in colonialist history that is steeped in racist origins. As a global society, but particularly in the US right now, there is welcome momentum to decolonize academia, which includes interrogating whose voices are represented and whose are not, challenging current paradigms by giving prominence to traditionally marginalized and underrepresented researchers, surfacing the racist historical drivers of modern policies, and advancing solutions to food policy challenges that redress inequities within and across nations.

I am at the very beginning of a mission to create a course that reflects these important considerations and that upends the ways that international food policy precepts have been taught and perpetuated in policy-making. To that end, I welcome (and will actively invite) collaboration, suggestions, and challenging questions from everyone in the class to aid in evolving a mutually beneficial classroom experience that reflects a vision of anti-racism, equity, and inclusion in its many forms.

It is our intent that students from diverse backgrounds and perspectives be well-served by this course, that your learning needs be addressed both in and out of class, and that the diversity that all of you bring to the class be viewed as a resource, strength and benefit. It is our intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let us know ways to improve the effectiveness of the course for you personally or for other students or student groups.

Course Summary*

<u>Class #</u>	<u>Date</u>	<u>Learning Objectives</u>
Part I: Measuring Key Outcomes Related to Food Security, Diet Quality, Poverty and Equality		
1	Sept 14	Food and Nutrition Policy: Concepts, Objectives, Trends, and Frameworks for Action
2	Sept 21	How Are Food Policy Outcomes Measured? Food Security and Healthy Diets
3	Sept 28	How Are Food Policy Outcomes Measured? Poverty and Inequality <i>Due: Select country for your term paper focus</i>
Part II: Ensuring Access to and Consumption of Healthy, Safe and Preferred Food		
4	Oct 5	Securing Stable Food Access and Building Resilience to Shocks: Social Protection Policies
5	Oct 12	Influencing Consumer Choice Through Targeted Fiscal Policies: Taxes, Subsidies <i>Assignment 1 Due Wednesday October 13: Food system trends and food security analysis</i>
6	Oct 19	Influencing Consumer Choice Through Information and Regulation: Dietary Guidance, Food Labelling, Food Bans
7	Oct 26	Influencing Consumer Health and Nutrition Through Food Safety Policies
8	Nov 2	La Libertad Case Study
Part III: Ensuring the Availability, Stability, and Sustainability of Healthy, Safe Food		
	Nov 9	NO CLASS: Substitute Wednesday's Schedule
9	Nov 16	Getting Food Prices Right, or Stable? Food Price Stabilization Policies
10	Nov 23	Developing Markets: International Food and Agriculture Trade <i>Assignment 2 Due Wednesday November 24: Food price trends</i>
11	Nov 30	Food System Transformation and Sustainable Food Production
12	Dec 7	Diversifying Crop Production for Better Nutrition & Nutrition Sensitive Agriculture
13	Dec 14	Putting it All Together: Integrated National Food and Nutrition Strategies
	Dec 19	<i>Term paper is due at 11:59pm on <u>December 19</u>, to be submitted electronically via Canvas.</i>

*This schedule is subject to modification at the instructors' discretion.

Expanded Syllabus and Reading List

Week Number – Date	#1 – Sept 14
Topic	Food and Nutrition Policy: Concepts, Objectives, Trends, and Frameworks for Action
Learning outcomes	<ul style="list-style-type: none"> • Get to know each other • Become oriented to course structure and expectations • Define and describe 1) food systems and 2) food policy • Analyze global and regional trends in food systems, forces affecting changes to the food system, desired outcomes of food policy
Case study challenge	<ul style="list-style-type: none"> • No case study this week.
Recommended Readings	<ol style="list-style-type: none"> 1. Fanzo, J., Covic, N., Dobermann, A., Henson, S., Herrero, M., Pingali, P., & Staal, S. (2020). A research vision for food systems in the 2020s: Defying the status quo. <i>Global Food Security</i>, 26, 100397. 2. Carducci, B., Keats, E.C., Ruel, M. <i>et al.</i> (2021). Food systems, diets and nutrition in the wake of COVID-19. <i>Nat Food</i> 2, 68–70. 3. Von Braun, J., Afsana, K., Fresco, L.O., Hassan, M., and Torero, M. (2021). Food Systems – Definition, Concept, and application for the UN Food Systems Summit. https://sc-fss2021.org/wp-content/uploads/2021/03/ScGroup_Food_Systems_paper_March-5-2021.pdf 4. Policy Brief No. 14. (June 2020). COVID-19: safeguarding food systems and promoting healthy diets. Global Panel on Agriculture and Food Systems for Nutrition. Web. Available: https://www.glopan.org/wp-content/uploads/2020/06/Covid-Brief.pdf 5. Popkin, B. M. (2017). Relationship between shifts in food system dynamics and acceleration of the global nutrition transition. <i>Nutrition Reviews</i>, 75(2), 73-82. 6. Fanzo, J. and Davis, C. (2021). Global Food Systems, Diets, and Nutrition. Chapter 2 Food Policy (NB: we are in the process of requesting access for this from the library and will post on Canvas when available)
Recommended Digital resources	<ul style="list-style-type: none"> • State of Food Security and Nutrition in the World. FAO, 2021 (3 minutes) • Various videos from the Global Panel on Agriculture and Food Systems for Nutrition. (Varied length)

Week Number – Date	#2 – Sept 21
Topic	How Do We Measure Food Policy Outcomes? Food Security and Healthy Diets
Learning outcomes	<ul style="list-style-type: none"> • Understand the evolution of concepts of food insecurity and hunger and their relationship to malnutrition • Know the importance of definition and measurement for shaping public policy • Debate the uses, pros and cons of standard food security measures • Distinguish the features of two key data sources for food policy analysis: food balance sheets vs. household consumption and expenditure surveys • Be able to plot and analyze trends in food security and diets.
Case study challenge	<ul style="list-style-type: none"> • Identifying fit for purpose food security indicators from the Data4Diets Platform to address food security and hunger in South Africa during COVID-19
Required Readings	<ol style="list-style-type: none"> 1. HLPE. (2020). Food security and nutrition: building a global narrative towards 2030. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome. <i>Chapter 1</i>. Web. Available: http://www.fao.org/3/ca9731en/ca9731en.pdf 2. Coates, J. (2013). Build it back better: Deconstructing food security for improved measurement and action. <i>Global Food Security</i>, 2(3), 188-194. 3. Pérez-Escamilla, R., Vilar-Compte, M., & Gaitán-Rossi, P. (2020). Why identifying households by degree of food insecurity matters for policymaking. <i>Global Food Security</i>, 26, 100459. 4. Zezza, A., Carletto, C., Fiedler, J. L., Gennari, P., & Jolliffe, D. (2017). Food counts. Measuring food consumption and expenditures in household consumption and expenditure surveys (HCES). Introduction to the special issue. <i>Food Policy</i>, 72, 1-6. 5. No work, no food: Pandemic deepens global hunger. New York Times, 6 August 2021. https://www.nytimes.com/2021/08/06/world/africa/covid-19-global-hunger.html
Recommended Digital Resources	<ul style="list-style-type: none"> • Data4Diets - Building Blocks for Diet-related Food Security Analysis Platform Videos – presenters Jennie Coates, Winnie Bell; ANH Academy, 2020 (1 hour 11 minutes) • Eat 2020 The Food System Dashboard - how does it work? Food System Dashboard, 2020 (6 minutes)
Recommended Readings	<ul style="list-style-type: none"> • Amjath-Babu, T. S., Krupnik, T. J., Thilsted, S. H., & McDonald, A. J. (2020). Key indicators for monitoring food system disruptions caused by the COVID-19 pandemic: Insights from Bangladesh towards effective response. <i>Food Security</i>, 12(4), 761-768. • FAO – SOFI 2021: Transforming Food Systems for Food Security, Improved Nutrition, and Affordable Healthy Diets for All • Desiere, S., Hung, Y., Verbeke, W., & D’Haese, M. (2018). Assessing current and future meat and fish consumption in Sub-Saharan Africa: Learnings from FAO Food

	<p>Balance Sheets and LSMS household survey data. <i>Global Food Security</i>, 16, 116-126.</p> <ul style="list-style-type: none"> • Herforth AW, Wiesmann D, Martínez-Steele E, Andrade G, Monteiro CA. (2020). Introducing a Suite of Low-Burden Diet Quality Indicators That Reflect Healthy Diet Patterns at Population Level. <i>Curr Dev Nutr</i>. 4(12):nzaa168. doi: 10.1093/cdn/nzaa168. PMID: 33344879; PMCID: PMC7723758. • Micha, R., Coates, J., Leclercq, C., Charrondiere, U. R., & Mozaffarian, D. (2018). Global Dietary Surveillance: Data Gaps and Challenges. <i>Food and Nutrition Bulletin</i>, 39(2), 175-205. • Miller, V., Webb, P., Micha, R., & Mozaffarian, D. (2020). Defining diet quality: a synthesis of dietary quality metrics and their validity for the double burden of malnutrition. <i>The Lancet Planetary Health</i>, 4. e352-e370. doi: 10.1016/S2542-5196(20)30162-5. • Masset, E. (2011). A review of hunger indices and methods to monitor country commitment to fighting hunger. <i>Food Policy</i>, 36(1), S102-S108. • Neufeld, L.M., Hendriks, S., and Hugas, M. (2021). Healthy diet: A definition for the United Nations Food Systems Summit 2021. https://www.un.org/sites/un2.un.org/files/healthy_diet_scientific_group_march-2021.pdf • Walls, H. L., Johnston, D., Mazalale, J., & Chirwa, E. W. (2018). Why we are still failing to measure the nutrition transition. <i>BMJ Global Health</i>, 3(1), E000657.
Week Number – Date	#3 – Sept 28
Topic	How do we measure food policy outcomes? Poverty and inequality
Learning outcomes	<ul style="list-style-type: none"> • Understand the evolution of poverty and inequality concepts • Debate the uses, pros and cons of a range of approaches to poverty and inequality measurement. • Know the data sources used to construct various poverty measures and be able to plot and analyze poverty trends. • Understand potential food system drivers of poverty and poverty alleviation
Case study challenge	<ul style="list-style-type: none"> • Setting a poverty line for India
Required Readings	<ol style="list-style-type: none"> 1. Rama, M. (2019). Challenges in Measuring Poverty and Understanding its Dynamics: A South Asian Perspective. <i>Review of Income and Wealth</i>, 65(S1), S2-S32. doi.org/10.1111/roiw.12438 2. Smeeding, T. (2016). Chapter 2: Poverty measurement. In D. Brady & Burton, L. (Ed.), <i>The Oxford handbook of the social science of poverty (Oxford Handbooks)</i> (pp. 21-46). New York, NY: Oxford University Press 3. Beck V., Hahn H., Lepenies R. (2020) Interdisciplinary Perspectives on Poverty Measurement, Epistemic Injustices and Social Activism. In: Beck V., Hahn H., Lepenies R. (eds) <i>Dimensions of Poverty. Philosophy and Poverty</i>, vol 2. Springer, Cham. https://doi.org/10.1007/978-3-030-31711-9_1

	<p>4. Bell, W., Lividini, K., and Masters., W.A. Global dietary convergence from 1970 to 2010 altered inequality in agriculture, nutrition, and health. <i>Nature Food</i>. 2: 15-165. https://doi.org/10.1038/s43016-021-00241-9</p>
Recommended Digital Resources	<ul style="list-style-type: none"> • World Bank - How is Poverty Measured? Gives a very basic overview of measuring poverty. World Bank, 2011 (3 minutes)
Recommended Readings	<ul style="list-style-type: none"> • Rylko-Bauer, B. & Farmer, P. (2016). Chapter 3: Structural violence, poverty, and social suffering. In D. Brady & Burton, L. (Ed.), <i>The Oxford handbook of the social science of poverty (Oxford Handbooks)</i> (pp. 47-74). New York, NY: Oxford University Press • Adiga, A. (2008). <i>The White Tiger: A novel</i>. New York: Free Press. <i>(must be purchased or borrowed from library.)</i> • Matthews D. (2019, February 12). Bill Gates tweeted out a chart and sparked a huge debate about global poverty. Vox. Web. Available: https://www.vox.com/future-perfect/2019/2/12/18215534/bill-gates-global-poverty-chart • Dotter, C. & Klasen, S. (2017). The Multidimensional Poverty Index: achievements, conceptual and empirical issues (No. 233). Courant Research Centre: Poverty, Equity and Growth-Discussion Papers. Available: https://www.econstor.eu/bitstream/10419/162856/1/893991872.pdf • World Bank. (2020). <i>Monitoring Global Poverty</i>. Washington, DC: World Bank. doi.org/10.1596/978-1-4648-1602-4_ch1

Week Number – Date	#4 – Oct 5
Topic	Securing stable food access: social protection policies
Learning outcomes	<ul style="list-style-type: none"> • Understand concepts of risk, vulnerability, and resilience as they relate to food policy, generally, and social protection policies in particular. • Typologize social protection policy instruments by primary objective. • Consider appropriateness of food-based transfers relative to cash or vouchers and other design decisions within a range of country contexts. • Determine whether the evidence base supports the utility of social protection policies for consumption smoothing vs. asset accumulation.
Case study challenge	<ul style="list-style-type: none"> • Building a better social protection program in Ethiopia in the time of COVID-19
Required Readings	<ol style="list-style-type: none"> 1. Abay, K.A., Berhane, G., Hoddinott, J., and Tafere, K. (2021). COVID-19 and Food Security in Ethiopia: Do Social Protection Programs Protect? IFPRI Discussion Paper. https://www.ifpri.org/publication/covid-19-and-food-security-ethiopia-do-social-protection-programs-protect 2. Gentilini U., (2016). Revisiting the Cash versus Food Debate: New Evidence for an Old Puzzle? <i>The World Bank Research Observer</i>, 31(1), 135–167. 3. Béné, C. (2020). Resilience of local food systems and links to food security – A review of some important concepts in the context of COVID-19 and other shocks. <i>Food Sec.</i> 12, 805–822. https://doi.org/10.1007/s12571-020-01076-1 4. Daidone, S., Davis, B., Handa, S., & Winters, P. (2019). The household and individual-level productive impacts of cash transfer programs in Sub-Saharan Africa. <i>American journal of agricultural economics</i>, 101(5), 1401-1431.
Recommended Digital Resources	<ul style="list-style-type: none"> • Virtual Event Social Safety Nets and COVID-19: Can we protect food security & nutrition? IFPRI, 2020 (1 hour 22 minutes)
Recommended Readings	<ul style="list-style-type: none"> • Banerjee, A. V. (2016). Policies for a better-fed world. <i>Review of World Economics</i>, 152(1), 3–17. • Béné, C. et al. (2015). Is resilience a useful concept in the context of food security and nutrition programmes? Some conceptual and practical considerations. <i>Food Security</i>. 8.10.1007/s12571-015-0526-x. • Devereux, S. (2016). Social protection for enhanced food security in sub-Saharan Africa. <i>Food Policy</i>, 60, 52-62. • Gilligan, D. (2020). Social safety nets are crucial to the COVID-19 response: Some lessons to boost their effectiveness. In J. Swinnen & J. McDermott (Eds.), <i>Covid-19 and Global Food Security</i> (pp. 102-105). Washington, DC: International Food Policy Research Institute. doi: 10.2499/p15738coll2.133762 • Barrett, C. B. & Constan, M.A. (2014). Toward a theory of resilience for international development applications. <i>Proceedings of the National Academy of Sciences</i>, 111(40). • Croppenstedt, A. et al. (2018). Social protection and agriculture: Introduction to the special issue. <i>Global food security</i>, 16, 65-68.

	<ul style="list-style-type: none">• Lavers, T. (2019). Social protection in an aspiring ‘developmental state’: The political drivers of Ethiopia’s PSNP. <i>African Affairs</i> (London), 118(473), 646-671.• Narayanan, S., & Gerber, N. (2017). Safety Nets for Food and Nutritional Security in India, <i>Global Food Security</i>, 15(37), 65–76.• Hertel, T.W. et al., (2021). Building resilience to vulnerabilities, shocks, and stresses. UN Food Systems Summit. https://www.un.org/sites/un2.un.org/files/5-action_track-5_scientific_group_draft_paper_8-3-2021.pdf
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Week Number – Date	#5 – Oct 12
Topic	Influencing Consumer Choice Through Economic Incentives: Taxes, Subsidies
Learning outcomes	<ul style="list-style-type: none"> • Conceptualize “food environment” as a target of food policy, in the context of LMIC trends • Understand the economic theory behind using subsidies and taxes to influence consumer choice. • Evaluate evidence of the effectiveness of taxes in combatting obesity and subsidies in encouraging greater consumption • Describe common political economy considerations in enacting subsidies • Compare general subsidies to targeted transfers as a type of social protection.
Case study challenge	<ul style="list-style-type: none"> • Political economy of sugar sweetened beverages (SSB) taxes in Mexico
Required Readings	<ol style="list-style-type: none"> 1. Colchero, M. A., Rivera-Dommarco, J., Popkin, B. M., & Ng, S. W. (2017). In Mexico, evidence of sustained consumer response two years after implementing a sugar-sweetened beverage tax. <i>Health Affairs</i>, 36(3), 564-571. 2. Allcott, H., Lockwood, B.B., and Taubinsky, D. (2019). "Should We Tax Sugar-Sweetened Beverages? An Overview of Theory and Evidence." <i>Journal of Economic Perspectives</i>, 33 (3): 202-27. 3. James, E, Lajous, M. & Reich, M.R. (2020) The Politics of Taxes for Health: An Analysis of the Passage of the Sugar-Sweetened Beverage Tax in Mexico, <i>Health Systems & Reform</i>, 6:1, DOI: 10.1080/23288604.2019.1669122 4. Blake, C. E., Frongillo, E. A., Warren, A. M., Constantinides, S. V., Rampalli, K. K., & Bhandari, S. (2021). Elaborating the science of food choice for rapidly changing food systems in low-and middle-income countries. <i>Global Food Security</i>, 28, 100503.
Recommended Digital Resources	<ul style="list-style-type: none"> • IFPRI - Barry M. Popkin, Distinguished Professor of Nutrition, UNC Gillings School of Global Public Health. International Food Policy Research Institute (IFPRI) 28th Annual Martin J. Forman Memorial Lecture, 2018. (43 minutes 51 seconds)
Recommended Readings	<ul style="list-style-type: none"> • Alagiyawanna et al. (2015). Studying the consumption and health outcomes of fiscal interventions (taxes and subsidies) on food and beverages in countries of different income classifications; a systematic review. <i>BMC Public Health</i>, 15(1), 887. • Colchero, M. A., Popkin, B. M., Rivera, J. A., & Ng, S. W. (2016). Beverage purchases from stores in Mexico under the excise tax on sugar sweetened beverages: Observational study. <i>BMJ</i>, 352, H6704. • Herforth A., & Ahmed S. (2015). The food environment, its effects on dietary consumption, and potential for measurement within agriculture-nutrition interventions. <i>Food Security</i>, 7(3), 505-520. • Bergallo, P., Castagnari, V., Fernández, A., & Mejía, R. (2018). Regulatory initiatives to reduce sugar-sweetened beverages (SSBs) in Latin America. <i>PloS one</i>, 13(10), e0205694. • Boysen, O. et al. (2019). Taxing highly processed foods: What could be the impacts on obesity and underweight in sub-Saharan Africa? <i>World Development</i>, 119, 55-67. • Kaushal, N., & Muchomba, F. M. (2015). How consumer price subsidies affect nutrition. <i>World Development</i>, 74, 25-42

	<ul style="list-style-type: none"> Phulkerd S et al. (2017). Level of implementation of best practice policies for creating healthy food environments: assessment by state and non-state actors in Thailand. <i>Public Health Nutrition</i>, 20(3), 381–90. Turner et al. (2018). Concepts and critical perspectives for food environment research: a global framework with implications for action in low- and middle-income countries. <i>Global Food Security</i>, 18, 93–101. Swinburn, B. et al (2013). Monitoring and benchmarking government policies and actions to improve the healthiness of food environments: a proposed Government Healthy Food Environment Policy Index. <i>Obesity Reviews</i>, 14, 24-37. Cornelsen, L., Green, R., Turner, R., Dangour, A. D., Shankar, B., Mazzocchi, M., & Smith, R. D. (2015). What happens to patterns of food consumption when food prices change? Evidence from a systematic review and meta-analysis of food price elasticities globally. <i>Health economics</i>, 24(12), 1548-1559. Downs SM, Ahmed S, Fanzo J, Herforth A. (2020). Food Environment Typology: Advancing an Expanded Definition, Framework, and Methodological Approach for Improved Characterization of Wild, Cultivated, and Built Food Environments toward Sustainable Diets. <i>Foods</i>. 22;9(4):532. doi: 10.3390/foods9040532. PMID: 32331424; PMCID: PMC7230632. Herrero et al., (2021). Shift to healthy and sustainable consumption patterns. UN Food Systems Summit. https://sc-fss2021.org/wp-content/uploads/2021/04/Action_Track_2_paper_Shift_to_Healthy_Consumption.pdf
Week Number – Date	#6 – Oct 19
Topic	Influencing consumer choice through information and regulation: dietary guidance, food labelling, food bans
Learning outcomes	<ul style="list-style-type: none"> Articulate the ways in which governments use information and regulation to influence consumer choice and health outcomes. Understand the range of common stakeholder perspectives and positions in support of and resistant to these policy categories Survey the landscape of the types of information and regulation actions most commonly adopted by LMICs. Realize the varied and sometimes unintended effects that these policy levers can have on other interest groups including producers and traders. Identify challenges and opportunities for improving the effectiveness of information and regulatory policies in LMICs.
Case study challenge	<ul style="list-style-type: none"> Weighing trade-offs from behavioral nudges through bans for affecting consumer choice in Chile
Required Readings	<ol style="list-style-type: none"> Taillie LS, Hall MG, Popkin BM, Ng SW, Murukutla N. Experimental Studies of Front-of-Package Nutrient Warning Labels on Sugar-Sweetened Beverages and Ultra-Processed Foods: A Scoping Review. <i>Nutrients</i>. 2020 Feb 22;12(2):569. doi: 10.3390/nu12020569. PMID: 32098363; PMCID: PMC7071470. Corvalán, C., Reyes, M., Garmendia, M. L., & Uauy, R. (2019). Structural responses to the obesity and non-communicable diseases epidemic: Update on the Chilean law of food labelling and advertising. <i>Obesity reviews</i>, 20(3), 367-374.

	<p>3. Just, D. R., & Gabrielyan, G. (2016). Why behavioral economics matters to global food policy. <i>Global food security</i>, 11, 26-33.</p> <p>4. Downs, S. M., Singh, A., Gupta, V., Lock, K., & Ghosh-Jerath, S. (2015). The need for multisectoral food chain approaches to reduce trans-fat consumption in India. <i>BMC Public Health</i>, 15(1), 693.</p>
Recommended Digital Resources	<ul style="list-style-type: none"> • Label This! BBC Sounds, 2018 (28 minutes) • Webinar: Development of Food-Based Dietary Guidelines in Ethiopia, and a Global Review of FBDG. ANH Academy, May 2019 (1 hour 31 minutes)
Recommended Readings	<ul style="list-style-type: none"> • Kanter, R., Vanderlee, L., & Vandevijvere, S. (2018). Front-of-package nutrition labelling policy: Global progress and future directions. <i>Public Health Nutrition</i>, 21(8), 1399-1408. • Herforth, A., Arimond, M., Álvarez-Sánchez, C., Coates, J., Christianson, K., & Muehlhoff, E. (2019). A Global Review of Food-Based Dietary Guidelines. <i>Advances in Nutrition (Bethesda, Md.)</i>, 10(4), 590-605. • Backholer, K., Beauchamp, A., Ball, K., Turrell, G., Martin, J., Woods, J., & Peeters, A. (2014). A framework for evaluating the impact of obesity prevention strategies on socioeconomic inequalities in weight. <i>American journal of public health</i>, 104(10), e43-e50. • World Health Organization (WHO). (2018). Web. Available: An action package to eliminate industrially-produced trans-fatty acids. • Kovic, Y., Noel, J. K, Ungemack, J. A, & Burleson, J. A. (2018). The impact of junk food marketing regulations on food sales: An ecological study. <i>Obesity Reviews</i>, 19(6), 761-769. • Machín, L., et al. (2016). Motives underlying food choice for children and perception of nutritional information among low-income mothers in a Latin American country. <i>Journal of nutrition education and behavior</i>, 48(7), 478-485. • Swinburn, B., et al. (2015). Strengthening of accountability systems to create healthy food environments and reduce global obesity. <i>The Lancet</i>, 385(9986), 2534-2545 • van Liere, M. J., et al. (2017). Harnessing private sector expertise to improve complementary feeding within a regulatory framework: Where is the evidence? <i>Maternal & Child Nutrition</i>, 13, e12429. • Wijesinha-Bettoni, R., Khosravi, A., Ramos, A. I., Sherman, J., Hernandez-Garbanzo, Y., Molina, V., ... & Hachem, F. (2021). A snapshot of food-based dietary guidelines implementation in selected countries. <i>Global Food Security</i>, 29, 100533. • FAO. (2016). Plates, pyramids, planet: Developments in national healthy and sustainable dietary guidelines: a state of play assessment.
Week Number – Date	#7 – Oct 26
Topic	Influencing Consumer Health and Nutrition Through Food Safety Policies
Learning outcomes	<ul style="list-style-type: none"> • Know the range of food safety threats facing the food system in LMICs • Consider potential trade-offs made by policy-makers and consumers in ensuring foods safety versus diet quality. • Apply policy strategies for improved food safety to a case study country context • Know the positions of key stakeholders facing food safety regulation, education, and other policy measures. Understand options for overcoming potential resistance from the private sector in implementing food safety policy activities.
Case study challenge	<ul style="list-style-type: none"> • Food safety in the dairy value chain in Kenya

Required Readings	<ol style="list-style-type: none"> 1. Aiyar, A., & Pingali, P. (2020). Pandemics and food systems - towards a proactive food safety approach to disease prevention & management. <i>Food Security</i>, 12(4), 749-756. 2. Jaffee, S., et al (2018). The Status of Food Safety Management in Developing Countries. In: <i>The Safe Food Imperative: Accelerating Progress in Low- and Middle-Income Countries</i>, pp. 69 – 122. doi.org/10.1596/978-1-4648-1345-0_ch3 3. Kang'ethe, E., Muriuki, S., Karugia, J., Guthiga, P. and Kirui, L. (2019). Scoping study report on: National food safety architecture of the horticulture value chain, Kenya. Prepared for the Voice for Change Partnership (V4CP). Nairobi, Kenya: ILRI. https://cgspace.cgiar.org/handle/10568/106195 4. Walls, H et al. (2019). Food security, food safety & healthy nutrition: are they compatible? <i>Global Food Security</i>, 21, 69-71
Recommended Digital resources	<ul style="list-style-type: none"> • Feed the Future/Agrilinks Webinar: Risky Business, Food Safety Concerns in Agricultural Development. Agrilinks, 2017 (1 hour, 28 minutes) • TZH 40 - Food Safety: Why it matters. Target Zero Hunger (FAO), 2018 (8 minutes)
Recommended Readings	<ul style="list-style-type: none"> • King, T. et al (2017). Food safety for food security: Relationship between global megatrends and developments in food safety. <i>Trends in Food Science & Technology</i>, 68, 160-175. • Patterson, G. T., Thomas, L. F., Coyne, L. A., & Rushton, J. (2020). Moving health to the heart of agri-food policies; mitigating risk from our food systems. <i>Global Food Security</i>, 26, 100424
Week Number – Date	#8 – Nov 2
Topic	La Libertad: A Capstone Simulation of Consumption-Side Policies for Social Protection
Learning outcomes	<ul style="list-style-type: none"> • Use data to inform policy design • Tailor policy to social, economic, and political context • Apply learning regarding social protection programming, vulnerability, and resilience • Design policy within budget constraints
Required Readings	<ol style="list-style-type: none"> 1. Rogers, B. L. & Coates, J. (2002). Food-based safety nets and related programs. Washington, D.C.: World Bank Institute, September 2002. <i>* This is a bit dated but formed the basis for the design of the original La Libertad exercise for the World Bank. It is useful in that it offers a lot of detail about the effects of variations in safety net design (i.e., the devil is in the details!)</i> 2. La Libertad briefing document (<i>forthcoming</i>)
Recommended Digital resources	None
Optional Resources	None
Week Number – Date	NO CLASS: Substitute Tuesday's schedule

Week Number – Date	#9 – Nov 16
Topic	Getting food prices right, or stable? Market reform, food price stabilization policies
Learning outcomes	<ul style="list-style-type: none"> • Understand economic theory explaining price transmission and winners/losers of food price increases, and instability. • Analyze food price trends since 2000 and understand drivers of market instability, particularly during 2007/08 price crisis compared to current global pandemic crisis • Review food price stabilization policies commonly employed by LMICs, contrasting Africa’s historical experience with that of Asia and typologizing country responses to 2008 food price crisis. • Debate the pros and cons of particular policies for given country contexts. • Analyze policy decisions from 2008 food price crisis and 2020 global pandemic crisis from a political economy lens.
Case study challenge	<ul style="list-style-type: none"> • Food price stabilization policies in Nigeria in the time of COVID-19
Required Readings	<ol style="list-style-type: none"> 1. Baltzer, K. (2015). International to domestic price transmission in fourteen developing countries during the 2007-08 food crisis. United Nations University, World Institute for Development Economics Research. 2. Olomola, A. (2015). Chapter 13: The Political Economy of Food Price Policy in Nigeria. In Pinstруп-Andersen P. (Ed). <i>Food Price Policy in an Era of Market Instability: A Political Economy Analysis</i>. United Nations University, World Institute for Development Economics Research. Oxford, England, UK: Oxford University Press. 3. Amolegbe, K. B., Upton, J., Bageant, E., & Blom, S. (2021). Food price volatility and household food security: Evidence from Nigeria. <i>Food Policy</i>, 102061. 4. Bai, Y., Costlow, L., Ebel, A., Laves, S., Ueda, Y., Volin, N., ... & Masters, W. A. (2021). Retail consumer price data reveal gaps and opportunities to monitor food systems for nutrition. <i>Food Policy</i>, 104, 102148.
Recommended Digital Resources	<ul style="list-style-type: none"> • Ag2Nut/ANH Academy Webinar: The cost and affordability of nutritious diets –ANH Academy, 2020 (1 hour 14 minutes).
Recommended Readings	<ul style="list-style-type: none"> • FAO. (2021). Web. Available: FAO Food Outlook: Biannual Report on Global Food Markets – June 2021, Covid-19. *skim only • Bryan, S. (2015). Chapter 3: A Cacophony of Policy Responses: Evidence from Fourteen Countries during the 2007–8 Food Price Crisis. In Pinstруп-Andersen P. (Ed). <i>Food Price Policy in an Era of Market Instability: A Political Economy Analysis</i>. United Nations University, World Institute for Development Economics Research. Oxford, England, UK: Oxford University Press. • Ellis, F., & Manda, E. (2012). Seasonal Food Crises and Policy Responses: A Narrative Account of Three Food Security Crises. <i>World Development</i>, 40(7):1407–1417. • Fan, S., Si, W., & Zhang, Y. (2020). How to prevent a global food and nutrition security crisis under COVID-19?. <i>China Agricultural Economic Review</i>. • Gouel, C. (2014). Food Price Volatility and Domestic Stabilization Policies in Developing Countries. In B.D. Wright (Ed.), <i>The Economics of Food Price Volatility</i> (261-306). Chicago, IL, University of Chicago Press. • Kalkuhl, M et al. (2016). Food Price Volatility and Its Implications for Food Security and Policy. Springer Open. doi:10.1007/978-3-319-28201-5

	<ul style="list-style-type: none"> • Laborde, D., Herforth, A., Headey, D., & de Pee, S. (2021). COVID-19 pandemic leads to greater depth of unaffordability of healthy and nutrient-adequate diets in low-and middle-income countries. <i>Nature Food</i>, 1-3. • Watson, D. (2015). Chapter 5: A Political Economy Synthesis: The Food Price Policy Crisis. In Pinstrup-Andersen P. (Ed). <i>Food Price Policy in an Era of Market Instability: A Political Economy Analysis</i>. United Nations University, World Institute for Development Economics Research. Oxford, England, UK: Oxford University Press.
Week Number – Date	#10 – Nov 23
Topic	Developing Markets: International Food Trade
Learning outcomes	<ul style="list-style-type: none"> • Understand why countries trade in food and agriculture and the role of trade in augmenting food availability and access • Know the role of global trade institutions • Understand debates over protectionist v. liberal trade policies and their potential effects on food security, livelihoods, and diet quality
Case study challenge	<ul style="list-style-type: none"> • Trade and nutrition in the Pacific Islands
Required Readings	<ol style="list-style-type: none"> 1. Thow, A. M., et al. (2011). Trade and the nutrition transition: strengthening policy for health in the Pacific. <i>Ecology of food and nutrition</i>, 50(1), 18-42. 2. Martin, W. J. & Glauber J. W. (2020). Trade policy and food security. International Food Policy Research Institute (IFPRI). In R. E. Baldwin & S. J. Evenett (Eds). <i>COVID-19 and Trade Policy: Why Turning Inward Won't Work</i>, (89-101). 3. Thow, A. M., & Nisbett, N. (2019). Trade, nutrition, and sustainable food systems. <i>The Lancet (British Edition)</i>, 394(10200), 716-718. 4. Global Panel on Agriculture and Food Systems for Nutrition: Trade. https://www.glopan.org/trade
Recommended Digital Resources	<ul style="list-style-type: none"> • Food Trade, Food Security and the SDGs: UNRISD Seminar. UNRISD, 2016 (41 minutes) • WTO Trade Dialogues on Food - COVID-19, Flattening the Food Insecurity Curve in Africa. WTO, 2020 (1 hour 33 minutes)
Recommended Readings	<ul style="list-style-type: none"> • Kosack, S., & Tobin JL (2015). Which Countries' Citizens Are Better Off With Trade? <i>World Development</i>, 76, 95–113. • Martin, W. (2017). Chapter 5: Agricultural Trade and Hunger In B. Shepherd (Ed.), <i>Win-Win: How International Trade can Help Meet the Sustainable Development Goals</i>. Brookings Institution Press. Available: https://www.adb.org/sites/default/files/publication/327451/adbi-win-win-how-international-trade-can-help-meet-sdgs.pdf#page=106 • Swinnen, J., et al. (2015). "The Role of Food Standards in Trade and Development". In A. Hammoudi, C. Grazia, Y. Surry, & J.-B. Traversac (Eds.), <i>Food Safety, Market Organization, Trade and Development</i>. Switzerland: Springer International Publishing • Clark, S. E., et al. (2012). Exporting obesity: US farm and trade policy and the transformation of the Mexican consumer food environment. <i>International Journal of Occupational and Environmental Health</i>, 18(1), 53–65.

	<ul style="list-style-type: none"> Werner, M., Isa Contreras, P., Mui, Y., & Stokes-Ramos, H. (2019). International trade and the neoliberal diet in Central America and the Dominican Republic: Bringing social inequality to the center of analysis. <i>Social Science & Medicine</i> (1982), 239, 112516.
Week Number – Date	#11 – Nov 30
Topic	Food Systems Transformation and Sustainable Food Production
Learning outcomes	<ul style="list-style-type: none"> Understand the role of agriculture in LMICs, the process of agricultural and food systems transformation, and links to poverty reduction. Articulate the range of futurecasts regarding the sufficiency of food production for a growing global population; understand the sources of these data, model parameters, and debates about their application. Trace trends in agro-processing and their promise for food security. Explore the relative effectiveness of policy actions for improving agriculture production and processing across a range of contexts. Become familiar with political economy analysis tools and apply them to country case studies
Case study challenge	<ul style="list-style-type: none"> Agricultural transformation in Viet Nam
Required Readings	<ol style="list-style-type: none"> Le Mouël, C., & Forslund, A. (2017). How can we feed the world in 2050? A review of the responses from global scenario studies. <i>European Review of Agricultural Economics</i>, 44(4), 541-591 Liu, Y., Barrett, C. B., Pham, T., & Violette, W. (2020). The intertemporal evolution of agriculture and labor over a rapid structural transformation: Lessons from Vietnam. <i>Food Policy</i>, 94, 101913. FAO. (2017). Strengthening sector policies for better food security and nutrition results. http://www.fao.org/3/i7212en/i7212EN.pdf Global Panel on Agriculture and Food Systems for Nutrition. Future Food Systems: For people, our planet, and prosperity. Foresight Report 2.0 Executive Summary. https://foresight.glopan.org/executive-summary/
Required Digital resources	<ul style="list-style-type: none"> CGIAR - 10 innovations to advance African agriculture for food and climate security. CGIAR, 2017 (3 minutes) Repurposing agriculture support to improve nutrition, health, and the environment. GloPan at the UN Food System Summit, 2021 (58 minutes)
Optional Resources	<ul style="list-style-type: none"> Barrett, C. B., Christiaensen, L., Sheahan, M., & Shimeles, A. (2017). On the Structural Transformation of Rural Africa. <i>Journal of African Economies</i>, 26(Suppl_1), I11-I35. Gatzweiler, F. W., & Von Braun, J. (2016). Technological and Institutional Innovations for Marginalized Smallholders in Agricultural Development. Cham: Springer Open. <i>*skim this useful document</i> Masters, W. A., Rosenblum, N. Z., & Alemu, R. G. (2018). Agricultural Transformation, Nutrition Transition and Food Policy in Africa: Preston Curves Reveal New Stylised Facts. <i>The Journal of Development Studies: Economic Transformation in Sub-Saharan Africa</i>, 54(5), 788-802.

	<ul style="list-style-type: none">• Béné, C., Oosterveer, P., Lamotte, L., Brouwer, I. D., de Haan, S., Prager, S. D., ... & Khoury, C. K. (2019). When food systems meet sustainability—Current narratives and implications for actions. <i>World Development</i>, 113, 116-130.• Hodson et al., (2021). Boost nature positive production. UN Food Systems Summit. https://sc-fss2021.org/wp-content/uploads/2021/04/Action_Track_3_paper_Boost_Nature_Positive_Production.pdf• Reardon, T. (2015). The hidden middle: the quiet revolution in the midstream of agrifood value chains in developing countries. <i>Oxford Review of Economic Policy</i>, 31(1), 45-63.
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Week Number – Date	#12 – Dec 7
Topic	Diversifying crop production for better nutrition / Nutrition-sensitive agriculture
Learning outcomes	<ul style="list-style-type: none"> • Understand policy measures to diversify crop production, potential winners and losers. • Conceptually link agriculture interventions to nutrition outcomes. • Know conditions under which increasing smallholder production diversity leads to improved consumption diversity.
Case study challenge	<ul style="list-style-type: none"> • Increasing diet quality in Western Kenya
Required Readings	<ol style="list-style-type: none"> 1. Ruel, M. T., Quisumbing, A. R., & Balagamwala, M. (2018). Nutrition-sensitive agriculture: What have we learned so far? <i>Global Food Security, 17</i>, 128-153. 2. Ickowitz, A., Powell, B., Rowland, D., Jones, A., & Sunderland, T. C. H. (2019). Agricultural intensification, dietary diversity, and markets in the global food security narrative. <i>Global Food Security, 20</i>, 9-16. 3. Global Panel on Agriculture and Food Systems for Nutrition: Ensuring sufficient availability of sustainably produced, nutrient-rich food. Chapter 4. https://foresight.glopan.org/chapter-4/ 4. Muthini, D., Nzuma, J., & Qaim, M. (2020). Subsistence production, markets, and dietary diversity in the Kenyan small farm sector. <i>Food Policy, 101956</i>.
Recommended Digital Resources	<ul style="list-style-type: none"> • Sustainable Food Systems and Nutrition - Making agriculture and food systems nutrition-sensitive. (2020). FAO eLearning Academy. (1 hour 6 minutes)
Recommended Readings	<ul style="list-style-type: none"> • Choudhury, S., & Headey, D. (2017). What drives diversification of national food supplies? A cross-country analysis. <i>Global food security, 15</i>, 85-93. • Pingali, P. (2015). Agricultural policy and nutrition outcomes – getting beyond the preoccupation with staple grains. <i>Food Security, 7</i>(3), 583-591. • Remans, R., Wood, S. A., Saha, N., Anderman, T. L., & DeFries, R. S. (2014). Measuring nutritional diversity of national food supplies. <i>Global Food Security, 3</i>(3-4), 174-182.
Week Number – Date	#13 – Dec 14
Topic	Putting it all together: integrated national food and nutrition strategies
Learning outcomes	<ul style="list-style-type: none"> • Know key elements of an integrated food and nutrition policy • Analyze data and contextual description to critique and assess food policy alternatives.
Case study challenge	<ul style="list-style-type: none"> • Food policy for Qatar
Required Readings	<ol style="list-style-type: none"> 1. Huang, J., & Yang, G. (2017). Understanding recent challenges and new food policy in China. <i>Global Food Security, 12</i>, 119-126.

	<p>2. Pingali, P., Mitra, B., & Rahman, A. (2017). The bumpy road from food to nutrition security – Slow evolution of India's food policy. <i>Global Food Security, 15</i>, 77-84.</p> <p>3. Woertz, E. (2020). Wither the self-sufficiency illusion? Food security in Arab Gulf States and the impact of COVID-19. <i>Food Security, 12</i>(4), 757-760.</p>
Recommended Digital Resources	None
Recommended Readings	None