Spring 2017 ECON 6460

## **Agriculture and Sustainable Development Syllabus**

<u>Darryl McLeod</u>, **E527 Dealy Class** 7:30-9:20pm Tuesday 110 Dealy Hall **See the** frequently updated course calendar for readings and assignments and the course web page.

**Course Description:** This course explores the role of agriculture in economic development, specifically its role in improving nutrition and health and providing livelihoods, both of which reduce poverty especially in rural areas. Sustainable development issues include the role of new technologies and reforestation to mitigate the impacts of climate change on income and output. Food aid, public works, food subsidies and financial inclusion. Local community development programs are also discussed. International trade including fair trade and See current course syllabus for more information. This course surveys the economics of agriculture and development drawing on published research, country case studies and models of agricultural development. We take an interdisciplinary approach to debates over new technologies, over poverty traps and malnutrition and with respect to community development and social innovations such as microfinance and fair trade/CSR exports. Since agriculture in many low-income nations are particularly vulnerable to climate change (Bangladesh and the Sahel region of Africa for example). Women's access and title to land as well as to credit and social protection programs is a key issue. Another ongoing debate focuses on the potential of genetically engineered seeds and foods. Finally, we review controversies over research methods, including randomized trials, natural experiments and a range of methods for evaluating the efficacy of policy interventions particularly policies aimed at reducing poverty and improving nutrition and health in rural areas. Course Requirements: Almost weekly assignments and class participation will count 25% and 15% of the course grade, respectively. The midterm (25%) and a final class presentation and project (35-40% depending if your project results also works as a concise will-written blog post). **Perquisites:** a one-semester course in intermediate Micro and Macroeconomics with applied econometrics strongly recommended.

The **class presentation project** is a key component of the course. See these introduction slides for ideas. One or two people may want to address a key debate, regarding food aid or microfinance or GMOs for example. Another approach is a case study, which could be country or an in-depth presentation of a key research question or policy debate. Food for work programs or targeted case transfers are used in many countries, or what micronutrients (as in Golden Rice). We will discuss the project during the first two classes a one page abstract will be due the 3<sup>rd</sup> week of class. A full summary with readings and some data or figures will be due the week of February 25<sup>th</sup> (we will not have class Feb. 21<sup>st</sup>).

Instructor: Darryl McLeod, E527 Dealy Hall, 718 817-0063 or 914 661-6998. Class in 102 Dealy See the web page for this course. Please send assignments to

**Accommodation:** Under the Americans with Disabilities Act and Section 504 of the Vocational Rehabilitation Act of 1973, all students, with or without disabilities, are entitled to equal access to the programs and activities of Fordham University. If you believe that you have a disabling condition that may interfere with your ability to participate in the activities, coursework, or assessment of the object of this course, you may be entitled to accommodations. Please schedule an appointment to speak with someone at the Office of Disability Services (Rose Hill - O'Hare Hall, Lower Level, x0655 or at Lincoln Center – Room 207, x6282).

**Books and Readings:** There is no text book for this course, books with some required reading and texts for review:

Byerlee, Derek; De Janvry, Alain; Sadoulet, Elisabeth; Townsend, Robert; Klytchnikova, Irina (2008) World development report 2008: agriculture for development. World Development Report; no. 30. Wash D. Collier, Paul (2010) The Plundered Planet, Chapter 10

- Dasgupta, Partha (1993) An Inquiry into Well-Being and Destitution, Oxford University Press, Chapters 15 and 17, 0198287568 (skip chapters with \*)
- Drèze, Jean, and Amartya Sen (1991). Hunger and Public Action. Oxford: Oxford University Press. ISBN-0-80198283652
- De Janvry, Alain, and Elisabeth Sadoulet (2016). *Development Economics: Theory and Practice*. Routledge. ISBN: 1138885295. [Chapter 18]
- De Janvry, Alain, Elisabeth Sadoulet, and Tavneet Suri (2016). Field experiments in developing country agriculture. Handbook of Economic Field Experiments.
- Heal, Geoffrey (2016). Endangered economies: how the neglect of nature threatens our prosperity. New York: Columbia University Press. ISBN: 0231180849 or ISBN: 0231180845. Kindle Edition
- Heal, Geoffrey (2000). Valuing the future: economic theory and sustainability. New York: Columbia University Press. ISBN: 0231113076.
- Ray, Debraj. Development economics (1998). Princeton: Princeton University Press. ISBN: 1400835898. [review chapters 10-12]
- Pinstrup-Andersen, Per, editor (2015). Food price policy in an era of market instability: a political economy analysis. Oxford University Press, USA, ISBN: 0198718574.
- Sen, Amartya (1981). Poverty and famines: an essay on entitlement and deprivation. Oxford: Oxford University Press. ISBN-13: 0198284635. [download PDF]
- Sen, Amartya (2000) Development as Freedom, Random House, Anchor Books, 0385720270.
- UN Department of Economic and Social Affairs, 2016 (DESA) *Climate Change Resilience: an Opportunity for Reducing Inequalities*, World Economic and Social Survey (WESS) October 2016, New York.
- World Bank. 2007. World Development Report 2008 : Agriculture for Development. Wash DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/5990 ISBN-13: 0-8213-6808-4.
- World Bank and International Monetary Fund. 2016. Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change. Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/22547 ISBN-13: 978-1464806698.

## **Preliminary Class Schedule Spring 2017**

Date	Lecture	Lecture Topics: Class Calendar (preliminary)
17-Jan	Lecture 1:	Introduction: Two Green Revolutions? Engel's Law
24-Jan	Lecture 2:	A Billion Hungry People? Poverty Traps, NBEW and famine
31-Jan	Lecture 3:	Models of Agricultural Development
7-Feb	Lecture 4:	Assets, Credit and Rural Poverty: the IPA-MFI Debate
14-Feb	Lecture 5:	Guest Lecture Ethiopia' PTP / Project Preview discussion
21-Feb	Class	res will follow a Monday schedule so we do not have a class
28-Feb	Lecture 6:	Migration, remittances and food security
7-Mar	Lecture 7:	Midterm Exam
14-Mar	Spring Break	
21-Mar	Lecture 8:	Women in Agriculture: land, sharing, migration & education
28-Mar	Lecture 9:	Guest Lecture: Food Price Instability
4-Apr	Lecture 10:	Delivering food aid, stopping famine: monetization of food aid?
11-Apr	Lecture 11:	The Demographic Transition: population and food supply
18-Apr	Lecture 12:	Genetic engineering, food and biofuels
25-Apr	Lecture 13:	CSR-Fair Trade-Community- Senegal Case Study
2-May	Lecture 14:	Project-Case Study Presentation
9-May	Lecture 15:	Project-Case Study Presentations

Lectures topics (see readings and preliminary schedule below)

- 1. Introduction: Two green revolutions?
- 2. A billion-hungry people? A Nutrition based Poverty Traps: theories of famine
- 3. Credit vs. asset based gender biased poverty reduction in Agriculture
- 4. Theories of structural transformation and technical change in Agriculture
- 5. Guest Lecture Professo Simons: Ethiopia's productive Transfers program
- 6. Food prices, poverty and malnutrition:
- 7. Guest Lecture: Understanding and managing agricultural price instability
- 8. Agriculture, climate change and Sustainable Development
- 9. Women in Agricultural and rural areas
- 10. Community based Development: micro-finance and fair Trade

## **Course Topics/Lectures**

## **Topic 1: Introduction**

Objectives of the course key issues, controversies and overview of course.

Economist, The new green revolution A bigger rice bowl <u>Another green revolution is stirring in the world's paddy fields May 10th 2014</u>, Los Baños, The Philippines, And Suphan Buri, Thailand.

Emerick, Kyle, Alain de Janvry, Elisabeth Sadoulet, and Manzoor H. Dar (2016) "<u>Technological innovations</u>, downside risk, and the modernization of agriculture." *American Economic Review* 106, no. 6:1537-61.

Timmer, C. Peter. (1988). <u>The agricultural transformation</u>. Handbook of development economics, vol. 1, Chapter 8, pages 275-331.

Timmer, C. Peter. (2017). <u>Food Security, Structural Transformation, Markets and Government Policy</u>. Asia & the Pacific Policy Studies.

\*\*Topic 2: Malnutrition and Poverty Traps: The Demand Side: Nutrition, Consumption and Food Security Fundamentals of Nutrition The Food Consumption Function Food Security: Concepts and Measurements A Billion hungry people: reading from Banergee Duflo Poor Economics The Nutrition based efficiency: Sala-i-Martin

https://books.google.com/books?hl=en&lr=&id=UKwgBnQgQ2cC&oi=fnd&pg=PA95&dq=Sala-i-martin+poverty+trap&ots=krZWNeVZ7Z&sig=ntGR7boopzHVweBojMOq93PYdp0#v=onepage&q&f=false

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