Microeconomics of environment and development
AAE 729

Professor Jennifer Alix-Garcia

Fall 2012

1 Preliminaries

Course schedule:	M: 2:30-4:55, ROOM SUBJECT TO CHANGE
Office:	417 Taylor Hall
E-mail:	alixgarcia@wisc.edu
Office Hours:	by appointment
Course Materials:	readings available on Learn@UW

2 Course description

This course crosses the boundary between development and environmental/resource economics, with a particular focus on household decision-making processes, both in isolation and when there are interactions with other households. The content of this course is theoretical and empirical, and will emphasize the process of testing theory with data.

In order that you see how the literature has built itself over time, we will begin with seminal papers on the empirics of economic growth. Then we will examine the macro evidence on the effects of the environment on development, and of development on the environment, by exploring the resource curse and environmental Kuznet's hypotheses. This "macro" section of the course will also touch on literature linking inequality and conflict to development. The second half of the course will examine the micro foundations of the poverty-environment nexus using household decision models. We will briefly discuss basic household modeling and then examine household decisions where there are strategic interactions, such as in the production of common resources and public goods. The discussion of these theories will

focus on how community level characteristics, like group size and inequality, may affect collective action problems. The effects of decentralization on communities, government programs, and the environment will also be considered, and we will take a brief foray into some of the papers applying spatial analysis to questions of poverty and the environment. The course will conclude with a short section on policy evaluation examining a limited set of policy tools and examples of the evaluation methods used to estimate their impact.
Prerequisites: AAE 635 or Economics 711 are strongly advised.

3 Course requirements

Assignment due dates and point distributions are given below. Late assignments will not be accepted.

Assignment	Points	Due date
Homework assignment 1	10 %	Oct 8
Referee report 1	10 %	Oct 22
Referee report 2	10 %	Nov 5
Homework assignment 2	10 %	Nov 12
Homework assignment 3	10 %	Dec 3
Research Proposal**	20 %	Dec 17
Gobbets	20 %	various
Paper presentations (2)	10 %	your choice

**Note that this assignment requires a presentation, which will be scheduled the week of classes. Course readings will be posted on the course website.

3.1 Homework assignments

Homework assignments will combine theory and data analysis. You will need to use Stata or some similar statistical package. The computers in the department's computer lab have Stata, and if you do not have an account for those computers please let me know and I will help you get one. Thanks to Laura Schechter, there is a handout available on the class website giving you some introductory information on how to get started in Stata. If you have more questions after looking at that please feel free to contact me. One advantage of using Stata is that I should be able to respond to your questions – this may not be true with other packages.

3.2 Referee reports

There are two referee reports due during the semester. The papers I have requested that you referee are from top job market candidates over the past year. The course web site contains a reference document describing how a referee report should be written. I have Elisabeth Sadoulet and Alain de Janvry to thank for this elucidation. The two papers are:

1. Vanden Eynde (2012) "Targets of Violence: Evidence from India's Naxalite Conflict" Job market paper, London School of Economics

2. LaFave (2012) "Farms, Families, and Markets: New Evidence on Agricultural Household Behavior" Job Market Paper, Duke University

3.3 Research proposal

The largest part of your grade will depend upon a detailed research proposal. The research proposal should be 10-12 pages, double-spaced. The research proposal should briefly (3-4 pages) survey an existing literature in Development Economics, and then describe a planned research project. You will present your proposal to the class during a 20 minute presentation at the end of the semester. All students must meet with me (in office hours) to discuss their topic by 10/1.

3.4 Paper presentations

Each of you will choose two papers from the syllabus to present in class. Do your best, in 30 minutes, to explain what the paper does (20 minutes), highlight what you see as its innovation/contributiont (5 minutes), and discuss questions open for future research (5 minutes). Try to pose questions to your colleagues that will both clarify understanding and stimulate discussion. Such discussion will be held until the end of your presentations. Please submit first and second paper choices for each presentation to me by **September 17**.

3.5 Gobbets

There will be 5 gobbets over the course of the semester. These writing opportunities entail the careful response to – or elaboration of – a question or statement. There is a two-page maximum length to the gobbets. Please use at least 1.5 spacing – my eyes cannot handle anything tighter. You can

thank Dan Bromley for this marvelous idea. Gobbet assignments will be posted with at least 2 days of anticipation on the course website.

4 Class schedule and readings

READINGS PREFACED WITH AN * ARE REQUIRED. OTHER READINGS ARE INTERESTING AND RELATED, BUT SUPPLEMENTAL. FOR YOUR PRESENTATIONS, YOU MAY CHOOSE READINGS WITH OR WITHOUT *.

This schedule is subject to change at any point within the semester.

1. **[SEPT 10]** First day of class: overview and expectations

2. Patterns of economic growth

   - **[SEPT 10]** Sala-i-Martin (2006) "The World Distribution of Income: Falling Poverty and... Convergence, Period" *The Quarterly Journal of Economics*
   - **[SEPT 10]** * Mankiw, Romer, and Weil (1992) "A Contribution to the Empirics of Economic Growth" *The Quarterly Journal of Economics* Vol. 107
   - **[SEPT 17]** Levine, Ross, and David Renelt (1992) "A Sensitivity Analysis of Cross-Country Growth Regressions" *American Economic Review* 82: 942-963.
   - **[SEPT 17]** * Deaton (2005) "Measuring Poverty in a Growing World (or Measuring Growth in a Poor World)" *Review of Economics and Statistics* 87(1): 1-19

   GOBBET 1: SEPT. 17

3. Inequality and growth

   - **[SEPT 17]** * Banerjee, Abhijit, and Duflo (2003) "Inequality and Growth: What Can the Data Say?" *Journal of Economic Growth* 8(3): 267-299
   - **[SEPT 17]** Forbes, Kristin (2000) "A Reassessment of the Relationship Between Inequality and Growth" *American Economic Review* 90(4): 869-887.

- **[SEPT 24]** * Banerjee, Abhijit, Mookherjee, Dilip, Munshi, Kaivan, and Ray, Debraj (2001) "Inequality, Control Rights, and Rent Seeking: Sugar Cooperatives in Maharashtra" *Journal of Political Economy* 109(1): 138-190.

GOBBET 2: SEPT. 24

4. The Resource Curse

   - **[SEPT 24]** Sachs and Warner (1997) "Natural resource abundance and economic growth" Center for International Development and Harvard Institute for International Development (revised version of NBER Working Paper No. 5398)
   - **[SEPT 24]** * Rodrik, Subramanian, and Trebbi (2004) "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development" *Journal of Economic Growth* 9(2)
   - **[OCT 1]** * Alexeev and Conrad (2009) "The Elusive Curse of Oil" *The Review of Economics and Statistics* 91 (3): 586-598

   GOBBET 3: OCT 1

5. Climate

   - **[OCT 1]** * Dell, Jones, and Olken (2009) "Climate Change and Economic Growth: Evidence from the last half century" NBER Working Paper 14132
   - **[OCT 1]** Dell, Jones, and Olken (2009) "Temperature and Income: Reconciling New Cross-sectional and Panel Estimates" *American Economic Review Papers and Proceedings*
   - **[OCT 8]** * Burgess, Donaldson, Greenstone, Deschenes (2011) "Weather and Death in India" Unpublished working paper.

6. Environmental Kuznet's curve

   HOMEWORK 1: OCTOBER 8

   - **[OCT 8]** Grossman and Krueger (1995) "Economic growth and the environment" *Quarterly Journal of Economics* 110:353-377
   - **[OCT 8]** * Foster and Rosenzweig (2003) "Economic Growth and the Rise of Forests" *Quarterly Journal of Economics* 118 (2): 601-637.

- **[OCT 15]** * Alix-Garcia, McIntosh, Sims, and Welch "The Ecological Footprint of Poverty Alleviation: Evidence from Mexico's Opportunidades Program" *Review of Economics and Statistics*, forthcoming
- **[OCT 15]** * Imbens and Wooldridge (2009) "Recent Developments in the Econometrics of Program Evaluation" *Journal of Economic Literature*, sections 1, 2, and 6.4

REFEREE REPORT 1: OCT 22

7. Civil war and development

- **[OCT 15]** Collier and Hoeffler (2004) "Greed and grievance in civil war" *Oxford Economic Papers* 56: 563-595
- **[OCT 15]** Blattman and Miguel "Civil War" *Journal of Economic Literature*
- **[OCT 22]** * Miguel, Satyanath, and Sergenti (2004)"Economic Shocks and Civil Conflict: An Instrumental Variables Approach" *Journal of Political Economy* 112(4): 725-753.
- **[OCT 22]** * Guidolin and La Ferrara (2007) "Diamonds are forever, Wars are not. Is conflict bad for private firms?" *American Economic Review* 97(5): 1978-93.
- **[OCT 22]** Vanden Eynde (2012)"Targets of Violence: Evidence from India's Naxalite Conflict" Job market paper, London School of Economics

GOBBET 4: OCT 29

REFEREE REPORT 2: NOV 5

8. Household modelling and household-resource relationships

- **[OCT 29]** Singh, Squire, and Strauss (1986) "Agricultural Household Models: Extensions, Applications, and Policy" Published for the World Bank by Johns Hopkins University Press, Part I.
- **[OCT 29]** * Benjamin (1992) "Household Composition, Labor Marets, and Labor Demand: Testing for Separation in Agricultural Household Models" *Econometrica*
- **[OCT 29]** * Jayachandran, S. (2006) "Selling Labor Low: Wage Responses to Productivity Shocks in Developing Countries"

- **[NOV 5]** * LaFave (2012) "Farms, Families, and Markets: New Evidence on Agricultural Household Behavior" Job Market Paper, Duke University
- **[NOV 5]** Lybbert, Barrett, Desta, and Coppock (2004) "Stochastic wealth dynamics and risk management among a poor population" *The Economic Journal* 114:750777.

HOMEWORK 2: NOV. 12

9. Common property resource management

   (a) Theory
   - **[NOV 5]** Stavins (2011) "The Problem of the Commons: Still Unsettled after 100 Years" *American Economic Review* 101: 81-108.
   - **[NOV 5]** * Baland and Platteau "Economics of Common Property Management Regimes", chapter 4 in *Handbook of Environmental Economics*, Volume 1, Edited by Maler and Vincent, focus on sections 1.4, 2, 3

   (b) Empirics
   - **[NOV 12]** Poteete and Ostrom (2008) "Fifteen Years of Empirical Research on Collective Action in Natural Resource Management: Struggling to Build Large-N Databases Based on Qualitative Research" *World Development* 36 (1): 176-195
   - **[NOV 12]** * Cardenas (2003) "Real wealth and experimental cooperation: experiments in the field lab" *Journal of Development Economics* 70: 263-289
   - **[NOV 12]** * Kremer, Leino, Miguel, and Zwane (2009) "Spring Cleaning: Rural Water Impacts, Valuation, and Institutions", mimeo, UC Berkeley Department of Economics

10. Decentralization and local governance

- **[NOV 12]** * Bardhan (2002) "Decentralization of Governance and Development" *Journal of Economic Perspectives* 16 (4): 185-205
- **[NOV 19]** * Baland, Bardhan, Das, Mookherjee (2010) "Forests to the People: Decentralization and Forest Degradation in the Indian Himalayas" *World Development* 38 (11)

- **[NOV 19]** Galasso and Ravallion (2005) "Decentralized targeting of an antipoverty program *Journal of Public Economics* 89: 705-727

11. Evaluation and environmental policy

    - **[NOV 19]** * Imbens and Wooldridge (2009) "Recent Developments in the Econometrics of Program Evaluation" *Journal of Economic Literature*, section 5
    - **[NOV 26]** Levitt and List (2009) "Field Experiments in Economics: The Past, The Present, and The Future" *European Economic Review* forthcoming
    - **[NOV 26]** * Oliva (2012) "Environmental Regulation and Corruption: Automobile Emissios in Mexico City" Working Paper UCSB Economics
    - **[NOV 26]** * Alix-Garcia, Shapiro, and Sims "Forest Conservation and Slippage: Evidence from Mexico's National Payments for Ecosystem Services Program" *Land Economics*, forthcoming

    HOMEWORK 3: DEC 3

12. Spatial analysis of development

    - **[DEC 3]** * Samuelson (1983) "Von Thunen at Two Hundred" *Journal of Economic Literature*
    - **[DEC 3]** Fafchamps and Shilpi (2003) "The Spatial Division of Labour in Nepal" *Journal of Development Studies* 39 (6): 23-66
    - **[DEC 3]** * Banerjee, Duflo, and Qian (2012) "On the Road: Access to Transportation Infrastructure and Economic Growth in China" Working Paper
    - **[DEC 3]** Sims (2010) "Conservation and development: Evidence from Thai protected areas" *Journal of Environmental Economics and Management*

13. One last paper: Bardhan (1993) "Economics of Development and the Development of Economics" *Journal of Economic Perspectives* 7(2): 129-142

14. RESEARCH PROPOSAL PRESENTATIONS: DEC 10

    FINAL PAPERS DUE DEC. 17