CSUS 848

Community-Based Natural Resource Management in Developing Countries

Spring 2015
3:00 – 5:50 PM Thursdays
Natural Resources Building, Rm 1

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Course Description

This course examines the prospects for natural resource management that succeeds in meeting productivity, conservation and poverty alleviation objectives in rural areas of developing countries. Weekly themes in the course are as follows:

- Human and natural system interaction
- The role of natural resources in rural livelihood systems
- Definition of institutions and their role in natural resource management
- Population-poverty-natural resource management links
- Property rights regimes: overview
- Management of natural resources: an introduction
- Common Property, Collective Management and Co-Management
- Promoting cooperation through community development and growth of social capital
- Insights about collective action from experimental economics
- Decentralization and democratization: implications for natural resource management
- Environmental values, risks and perceptions
- Overview of institutional arrangements to encourage conservation for off-site benefits (e.g. biodiversity)
- Tourism, conservation and local livelihoods
- Payment for environmental services

Throughout the course there will be an emphasis on understanding how institutional arrangements governing natural resource management operate in the context of given cultural, economic, legal, policy and biophysical conditions.

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1 This syllabus has drawn on the syllabus developed by John Kerr from CSUS, Michigan State University.
Introduction, Aims, Objectives

Billions of people in developing countries earn their livelihoods from direct utilization of natural resources such as agricultural land and water, rangelands, forests and fisheries. Widespread degradation of these resources has made them less productive, causing disproportionate hardships on the poorest people who depend on them most directly. Theories abound about the causes of and possible solutions to natural resource degradation problems, covering issues such as population growth, technology, markets, economic policies and social institutions. Efforts to improve natural resource management often have involved government controls on local people's access and use, while numerous development projects have undertaken financial investments to introduce improved technology. Price policies and market reforms also have been used to influence resource management. Elements of these approaches have contributed to improved natural resource management, but evidence suggests that lasting solutions will remain elusive unless they include locally acceptable and enforceable institutional arrangements governing the use of natural resources.

Important institutional issues include:

- The specification and assignment of rights that dictate who may use a natural resource in a given way, and responsibilities that guide people to manage natural resources and protect them from degradation;
- The extent of collective action whereby people jointly protect or improve a natural resource;
- The extent to which government policy and practice plays a supporting role in specifying rights and responsibilities and promoting collective action.

Since the late 1980s the literature on property rights and collective action for natural resource management has grown steadily. It points to a range of natural resource management successes and failures under different property regimes, and it is steadily gaining insights into the elements of effective management institutions. This literature is highly interdisciplinary, drawing on all the social sciences and applied to a great variety of biophysical, socioeconomic and cultural contexts. It offers students interested in natural resource management and development exposure to a wide range of conceptual tools and analytical methods associated with both single discipline and interdisciplinary inquiry.

At the same time, it is also important to recognize that “community-based natural resource management” has become a development buzzword. At times policymakers and project managers promote it unquestioningly, without sufficient understanding of what conditions are necessary to make it likely to succeed in promoting productivity, conservation, and equity. In fact, it is at least as easy to find cases of failures as successes in community-based natural resource management. Debates about how to promote better natural resource management are as strong as ever.

Aims: This course has three specific aims:

- To introduce students to the role of institutional arrangements in natural resource management and the forces behind the evolution of property regimes.

- To encourage students to think critically about the characteristics of appropriate and inappropriate institutional arrangements under a variety of socioeconomic and biophysical conditions.
- To expose students to a large and growing literature and a range of concepts and analytical methods associated with the interdisciplinary study of institutional arrangements in natural resource management.

**Objectives:** On completion of this course, students should be able to:

- Critically evaluate the strengths and weaknesses of various theories and arguments related to rural natural resource management in developing countries.

- Explain the links between institutional arrangements including governance and the incentives that guide people, individually or collectively, to conserve or degrade natural resources.

- Understand links among productivity, conservation and equity under a range of institutional arrangements for natural resource management.

- Apply these concepts to a natural resource management problem of particular interest to them.

**Format**

Class sessions will follow a seminar format. Class discussion will focus on concepts and problems raised in weekly readings that each student is expected to have read prior to each session. Each week a group of students will make a short presentation on the week’s topic and help guide the discussion.

**Assignments and Evaluation**

**Weekly Memos**

Each student is expected to write a short (1-2 pages) memo to be distributed among participants in the class every second week starting January 22. *I will split the class into two groups, each student will have the responsibility to write the memos in alternating weeks.* Students should reflect on the readings for that week and related topics. The main idea is just to spend some time thinking about some key issues raised in the week's readings; this will help generate discussion. What the student writes should demonstrate that he has actually read the papers but there’s no need to summarize everything. It’s important to focus on broad issues rather than, for example, just focus narrowly on one small detail. From time to time, I might ask for comments on a particular subject. The writing style is not part of the grade – the idea is to let your thoughts flow without worrying about style. You should aim to raise interesting, thoughtful points for discussion (as opposed to just regurgitating what’s in the readings). At the end of your memos you should conclude with a few discussion questions.

*Each one of you is supposed to do the readings for each week.*

Memos should be posted under the corresponding Forum for all class participants to read. Memos are due Wednesday by 11:00 a.m. If this poses a problem for you, please let me know and we can discuss. But the idea is to make sure others (the ones writing the memos for that week and the ones not writing for that week, and me including me have time to read them. I will use the memos as part of my presentation in class.

These memos are not individually graded, but they will represent 30 points of the final grade. The faithfulness and quality of the memos will be reflected in this part of the grade.
The memos should demonstrate that you read everything and thought about it. Early in the semester I will be sure to let you know if your memos are what I am looking for, and in the middle of the semester I will give everyone feedback about how you are doing on memos overall.

**A short paper**

Each student will write a paper on a topic of their choice, subject to the condition that it should be relevant to the main topics of the course. This condition is really not very constraining – if you have an idea and don’t think it really fits, I suspect that I can help you frame it in a way that does fit. So don’t be shy about sharing your ideas. Regardless of your idea, I ask you to please share it with me because hopefully I will be able to give you useful feedback and you need my approval on your topic before you start the paper.

There are a lot of different ways to pursue this assignment. One useful approach is to take a topic that you are interested in researching, possibly for your Masters or PhD thesis, and add an angle related to ideas covered in the class (such as property rights, gender, collective action or institutions) that you had not previously considered. Another approach would be to write a literature review on a specific topic that you are interested in; you could also write a project proposal – presumably a hypothetical one. (If you write a proposal, the part that you turn in for the class should only be the substantive academic part – no budget and no logistical details.) Frequently there are special journal issues that focus on a topic relevant to this class; you could review the articles in such a special issue if you wanted to. (Examples are the recent Word Development Report (March 2014) on forest conservation, including REDD+ activities; several recent issues of Ecological Economics with special sections on payment for environmental services and in 2011 one on experimental approaches to studying collective action in rural areas of developing countries; the special issue from the International Journal of the Commons on resilience and adaptation in the governance of social-ecological systems from 2011; Ecology and Society with a special issue on Global Water Governance from 2013. You could also review a book or books. Again, please share your ideas with me; most likely whatever you really want to do will work. Papers should be concise (between 2000 and 2500 words excluding references, 1 inch margins, 12 Times Roman font) and analytical, focusing more on applying concepts relevant to this class to a selected research problem and less on describing the case. Papers that are more analytical and original will earn a higher score than those that are not. I will work closely with each student on how to make this assignment as useful as possible to you and to make sure you understand what I am asking for. The word limit of 2500 words is strict!

In a paper of this length, you are best off beginning with a short and very clear introduction that lays out the problem, why it is important, and what you will do in the paper. After that there are a number of ways to proceed but a very effective one would be to address two or three main ideas, devoting a couple of paragraphs to each one. Or if you went into more depth you might focus on just a single big idea and you’d want to organize you discussion of that idea as clearly as possible. Then wrap up with a short conclusion that spells out the take-home message.

The key point is to be well organized as this makes it much easier for the reader to follow and thus be persuaded by what you are trying to say. This is an effective approach for any kind of academic or other professional writing and it’s an important skill to have. I feel strongly that if you cannot organize a short paper very effectively you will have a very difficult time organizing a longer paper (like a thesis or dissertation).

The paper is worth 40 points. For the paper, each student must turn an idea of the paper they want to write on by **February 19**, I will meet with each one of you individually to discuss that idea, then
by March 23 you need to submit a first draft of that paper. The first draft will be worth 15 points and I will give you feedback. The second and final draft will receive a separate score worth 25 points. The final paper is due April 20. Since learning how to meet deadlines is an essential skill for all academics and professionals, all deadlines are taken as seriously here as in the real world of work.

Final paper's presentation
The final paper will be presented on May 7 by someone other than the author, who will first present the paper and then will provide an initial critique. The author will have an opportunity for immediate response, and there will be a general discussion of each paper. This presentation is worth 10 points.

Presentations
Twice during the semester each student will give a short presentation on key issues related to the week's topic. The student should meet with me before class (ideally Monday morning or early afternoon on Tuesday), so that I plan the class according to the topics covered in those presentations. Normally we will have two students presenting. It will be timed and part of the grade is to keep it between 5 and 7 minutes. The main purposes of this assignment are to: 1) raise some good points for discussion, 2) practice giving a good, short presentation. You will be able to choose the weeks when you want to present, those spots will be assigned on first come first serve basis, thus I suggest sending me an email with your two preferred weeks as soon as possible. I reserve myself the right to assign you a week in case I do not hear from you soon, and the other topics are already covered.

Please keep in mind that it is very difficult but very important to be able to give a good but concise presentation. It would be much easier to talk for 10 or 15 minutes than 5-7 but the point of the assignment is to keep it concise. We will use a timer and enforce the time strictly. If you have more to say than you can fit into 7 minutes, we can probably find a way to get it into our discussion but it must be done outside of the presentation time.

The presentations are worth 5 points each. Assessment criteria are that it should be clearly presented, well organized, linked clearly to other readings so that other students understand why it belongs, get interesting points across, stay within the time allotted, and have useful visual aids as appropriate. (Sometimes visual aids aren't needed and you don't have to use powerpoint if you prefer not to.)

Helping organize the class session in conjunction with your presentation
Each week one of the students who give a presentation will be responsible for working with me to organize the week’s class. This can be done by raising useful discussion questions and/or coming up with an interesting and instructive approach that raises interesting points. It can involve identifying an interesting video, helping lead a useful discussion session, designing a role play activity that demonstrates some useful points, doing an experiment, or some combination of these things. You will be able to choose the week that you want to co-organize the class activity with me, as for the presentations those spots will be assigned on first come first serve basis, thus I suggest to send me an email with that information as soon as possible. Of course I’ll work closely with students in this. I am completely open to suggestions about customizing this assignment if someone has a good idea.

The idea here is not to make you do my job but to give everyone a chance to help set the agenda for what we do.
Your work in helping organize the class session contributes to your participation grade.

This class commitment implies that you will need to sit with me ahead of class time to discuss how we are going to organize the section. Budget this time in your agenda!

**Participation**
Class participation is worth 10 points toward your overall grade. There are many ways to participate and this is less a matter of speaking up all the time and more about being engaged and giving a good effort. Helping organize class sessions contributes to your participation grade.

**Other**
I reserve the right to raise the overall grade a bit for students who have worked hard and demonstrated that they have learned something during the semester.

### Overall grading for the class

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Total points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memos:</td>
<td>30</td>
</tr>
<tr>
<td>Presentations (2 x 5):</td>
<td>10</td>
</tr>
<tr>
<td>1st draft of final paper</td>
<td>15</td>
</tr>
<tr>
<td>Final draft of final paper</td>
<td>25</td>
</tr>
<tr>
<td>Final presentation</td>
<td>10</td>
</tr>
<tr>
<td>Participation</td>
<td>10</td>
</tr>
</tbody>
</table>

**Total:** 100

### Grading scale for the course

- 93 to 100% 4.0
- 87 to 93% 3.5
- 80 to 87% 3.0
- 75 to 79% 2.5
- 70 to 74% 2.0
- 65 to 69% 1.5
- 60 to 64% 1.0
- <60% no credit

**Resource Economics Specialization and Area Studies (FLAS) Specializations**
The course can be taken to meet the requirements of FLAS students. If your FLAS fellowship requires that at least 25% of this course focuses on Africa or Latin America or some other region, we can tailor your assignments to make sure you meet that requirement.

The course can also qualify as part of the CASID specialization. Be sure to clear this with CASID. In the past this course has been eligible for credit as part of the interdepartmental specialization in Environmental and Resource Economics. Students who wish to receive credit for this specialization should double check with the specialization coordinator to make sure it is still eligible. If so, those students must focus their assignments on the relevance of the concepts and issues presented in
class to their interest in resource economics, for which we can at least partially customize the reading list. The students and instructor can discuss this to jointly agree on how the students will accomplish this.

**Late Assignments**
Late submissions of assignments will be discounted 20% of the total possible points. This is only fair to those in the class who made every effort to meet deadlines; otherwise they would be disadvantaged relative to those who took more time.

Unexpected events take place and factors out of our control can obstruct our plans. I will be highly sensitive to such things, and any students with personal circumstances that hamper their ability to carry out certain tasks on time are encouraged to contact me in advance. On the other hand, I will be much less flexible if students do not contact me in advance.

**Policy on Plagiarism:**
Plagiarism in written assignments (i.e. the copying of material without citation of the source) is unacceptable behavior. It will lead to a zero on the assignment.

**Reading Materials**
All the readings for this course will be available electronically.

**CSUS 848. Detailed Course Outline and Reading List**

Note: some of this will be subject to change depending on students’ interests and if I find new readings during the course of the semester. Also, you will see that I have listed a large number of recommended readings. Let me know if sometimes you would prefer to read one of the recommended readings in place of one of the required readings so that I can let you know in which cases they are interchangeable, as opposed to when one of the required readings contain key messages I want to make sure everyone gets.

If you want to read ahead, please check with me in advance. That will help me make sure you don’t read one thing only to have me change the reading list.

**January 15: Introduction to the class**

**January 22: Human and natural system interaction**

*Required:*


**Recommended:**


**3. January 29: The role of natural resources in rural livelihoods systems**

**Required:**


**Recommended:**


**4. February 5: Definition of institutions and their role in natural resource management**

**Required:**


**Recommended:**


See the special issue of *World Development* (Volume 33, Number 2, February 2005) on institutional arrangements for rural poverty reduction and resource conservation. *The articles are referred to in the Barrett et al. article so you can see if any of them interest you. All the articles are available electronically on the MSU Library web page. Some of them come up later in the semester.*

**5. February 12.**

I will be doing field work in Tanzania this week, for that reason this class will be rescheduled later in the semester (suggested February 27 during the day)

**6. February 19: Poverty-population-natural resource management links**

**Required:**


Read one of the following two chapters: "Malthus in Africa: Rwanda's genocide." Chpt 10, pp 311-328. “One island, two peoples, two histories: the Dominican Republic and Haiti.” Chpt 11, pp 329-357.

**Recommended:**


doi:10.1016/j.gloenvcha.2007.05.005
id=12598 (A review of Jared Diamond's "Collapse.")
doi:10.1016/j.worlddev.2003.11.003
degradation: revising the theoretical framework. In More people, less erosion: environmental 
recovery in Kenya. Chichester, UK: John Wiley & Sons Ltd.
Jodha, N. S. (1985). Population growth and the decline of common property resources in Rajasthan, 

6. February 26: Property rights regimes: overview

**Required:**
resources, 2005: the wealth of the poor: managing ecosystems to fight poverty (pp. 55–63). 
Washington, D.C: World Resources Institute. (first half only: pp 55-62 on tenure.)
Eggertson, T. (1996). The economics of control and the cost of property rights. In S. Hanna, C. Folke, 
& K.-G. Måler, Rights to nature: ecological, economic, cultural, and political principles of 
institutions for the environment (pp. 157 – 178). Washington, D.C: Island Press.
Land Economics, 68(3), 249.
doi:10.1007/s10745-011-9375-1

**Recommended:**
critical assessment. Development and Change, 27(1), 29–86. doi:10.1111/j.1467- 
7660.1996.tb00578.x
347–359.
Place, F. (2009). Land tenure and agricultural productivity in Africa: a comparative analysis of the 
economics literature and recent policy strategies and reforms. World Development, 37(8), 
prescription for the wrong malady. Land Use Policy, 26(1), 20–27. 
doi:10.1016/j.landusepol.2008.02.003
Development, 37(8), 1307–1316. doi:10.1016/j.worlddev.2008.08.010

DC: A co-publication of the World Bank and Oxford University Press, Oxford [England], New 
York.


8. February 27: Management of Natural Resources: an introduction

Required:


Recommended:


9. March 5
Common Property, Collective Management and Co-Management

Required:


**Recommended:**

*The Digital Library of The Commons offers open access to thousands of articles on the topic of the commons.*


**(Co-management):**


March 12: Spring break

9. March 19
Promoting cooperation through community development and growth of social capital

Dr. John Kerr will be a visiting speaker for this class.

**Required:**

**Recommended: These focus on heterogeneity and inequality**

**These focus on organizing communities:**

10. March 26
Insights about collective action from experimental economics

**Required:**
Please read the Wikipedia entry on the prisoner's dilemma. Read the initial overview and the short section called “strategy for the classical prisoners dilemma,” and then anything else you want. (This will help give useful background for what follows.)


**Recommended:**


See the entire issue of Ecological Economics on field experiments. This is the introductory article to that issue:


Chapter 2 has some simple beginnings about game theory related to the prisoners’ dilemma.

Chapter 4 has more detail on the prisoners’ dilemma.

Chapter 5 becomes more complex, presenting alternative contexts that change incentives.

Chapter 6 looks at moral norms and cooperation

Chapter 7 goes into more game theory based on experimental psychology.

**11. April 2**

**Decentralization and democratization: implications for natural resource management**

**Required:**

Ribot, J. (2002). Democratic decentralization of natural resources: institutionalizing popular participation. *Read pp 1-3 for the overview of key points and refer to the main text if anything is unclear.*


**Recommended**


Kumar, Kundan. 2004. Draft paper on democratization and decentralization in India.


Weaver, M. A. (2000). Gandhi’s daughters: India’s poorest women embark on an epic social experiment. *New Yorker, 10*.

**12. April 9**

**Environmental values, risks and perceptions**

**For this section I will lead alone the complete section**

**Required:**


**Recommended:**


13. April 16

**Encouraging conservation where benefits are off-site: overview**

**Required:**


**Recommended:**


13. April 23
Tourism, conservation, and local livelihoods

**Required:**


### 14. April 30

**Payments for environmental services**

**Required:**


**Recommended:**


Economist special report on REDD, September 2010

May 7: Students presentations

There are no required readings this week but here are a couple of useful synthesis pieces:

