CSUS 848

Community-Based Natural Resource Management in Developing Countries¹

Spring 2018
3:00 – 5:50 PM Thursdays
306 Natural Resources Building

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Office hours: by appointment

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 include:

- Human and natural system interactions
- The role of natural resources in rural livelihood systems
- Definition of institutions and their role in natural resource management
- Environmental values, risks and perceptions
- Property rights regimes: overview
- Management of natural resources: an introduction
- Common Property, Collective Management and Co-Management
- Gender and Resource Management
- Encouraging conservation where benefits are off site: overview
- 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
- Payment for environmental services
- Tourism, conservation and local livelihoods

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.

Introduction, Aims, Objectives

¹ This syllabus has drawn on the syllabus developed by John Kerr from CSUS, Michigan State University.
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. Please contact me ahead of time if you must miss a class.

**Assignments and Evaluation**

**Short reaction papers**

Each student is expected to write 2 short papers reacting to a week’s readings. The selection of the topic should be on a 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 and the other topics are already covered.

Each reaction paper should be 2-3 pages (excluding references, 1 inch margins, 12 Times Roman font). 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 a week’s readings; to help generate discussion. What the student should demonstrate that he/she has actually read the papers (individual pieces), but also understood the overall content of the readings. There is no need to summarize, instead think about some key issues raised in that week’s readings; this will help generate discussion. 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. At the end of your reaction papers you should conclude with a few discussion questions, that can be used as part of the class discussion.

Reaction papers should be posted under the corresponding Forum in D2L for all class participants to read. Reaction papers are due Tuesdays at 8 PM. 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 reactions papers for that week and the ones not writing for that week, and me) have time to read them. I will use the reactions papers as part of my presentation in class. These reaction papers are individually graded, each 10 points each.

However, regardless of the week, all students are supposed to do the readings for each week.

**Presentations**

Twice during the semester each student will give a short presentation on key issues related to a week’s topic. The student should either email me his/he ideas or meet with me before class (be aware that I am teaching two courses this semester, so my time is scarce), so that I plan the class according to the topics covered in those presentations.

Normally we will have two students presenting. Each presentation will be timed and part of the grade is to keep it to between 7 and 9 minutes. The main purpose of this assignment is to: 1) raise some good points for discussion, and 2) to practice giving a good, short oral presentation.
As for the reaction papers, those spots will be assigned on a first come first served basis, thus I suggest to send me an email with that information as soon as possible. The presentations are worth 10 points each. Assessment criteria are that it should be clearly presented, be well organized, linked clearly to other readings so that other students understand, get interesting points across, stay within the time allotted, and have useful visual aids. (Sometimes visual aids aren’t needed and you don’t have to use “powerpoint” if you prefer not to.)

**Helping organize one session**

Once during the semester you will be responsible for working with me to organize a week’s class. You can do this by raising useful discussion questions and/or coming up with an interesting and instructive approach that raises interesting points, by doing an activity that is related to the readings, etc. 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. As for the reaction papers and presentations, those spots will be assigned on a first come first served 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.

This class commitment implies that you will need to meet with me ahead of class time to discuss how we are going to organize the section. Budget this time in your agenda! 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 in class, and prepare you for teaching a similar course in the future. The organization of the section is worth 15 points each.

**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, institutions or experimental economics) 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 World Development Report (March 2014) on forest conservation, including REDD+ activities; several recent issues of Ecological Economics with special sections on payments for environmental services and another one in 2014 on forest and livelihoods; The International Journal of the Commons had a special issue on 2014 dedicated to large socio-ecological systems and another one in 2011 on resilience and adaptation in the governance of social-ecological systems; Ecology and Society had a special issue on Global Water Governance in 2013. Experimental Economics did a special issue in 2011 on experimental approaches to studying collective action in rural areas of developing countries, and it just published another one on collective action in Latin America that contains many papers with experiments conducted in the field. Ecology and Society and Journal of Economic Behavior and Organization had special issues in 2015 in the topic of field.
experiments as well. 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 have between 2500 and 3000 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 3000 words is strict!

The paper is worth 30 points. For the paper, each student must turn a memo with a proposed topic and why it is important to study it and an outline of the paper they want to write on by February 19. I will meet with you to discuss your ideas ahead of time, please do not wait until the very last minute to do that. By March 26 you need to submit a first draft of that paper. The first draft will not be graded, but you will receive feedback from me and from somebody else in the class. The revision that you do of somebody’s else paper is worth 10 points. The revision of somebody’s else draft is due on April 2nd. The final draft will receive a score worth 30 points. The final paper is due April 23.

Final paper’s presentation
The final paper will be presented on May 3 by someone other than the author (different from the person that did the comments on the first draft), a presenter, who will first present the paper and then will provide an initial critique. This presentation is worth 15 points.

Participation
Class participation is worth 15 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 making 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 during the semester.

Overall grading for the class

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Total points</th>
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<tbody>
<tr>
<td>Reaction paper (2 x10)</td>
<td>20</td>
</tr>
<tr>
<td>Presentations (2 x 5):</td>
<td>10</td>
</tr>
<tr>
<td>Help organize section</td>
<td>10</td>
</tr>
<tr>
<td>1st draft of final paper (not graded)</td>
<td>10</td>
</tr>
<tr>
<td>Comments of somebody’s first draft</td>
<td>10</td>
</tr>
<tr>
<td>Final paper</td>
<td>25</td>
</tr>
<tr>
<td>Final presentation</td>
<td>15</td>
</tr>
<tr>
<td>Participation</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100</strong></td>
</tr>
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</table>
Grading scale for the course

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
<th>GPA</th>
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<tbody>
<tr>
<td>93 to 100%</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>87 to 93%</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>80 to 87%</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>75 to 79%</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>70 to 74%</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>65 to 69%</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>60 to 64%</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>&lt;60%</td>
<td>no credit</td>
<td></td>
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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.

The course is also part of the Gender, Justice and Environmental Change (GJEC), and the Ecological Food and Farming System specialization (EFFs).

Late Assignments
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. 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.

Communication Policy
Email is the best method for sharing information with me. I will do my best to respond within 24-48 hours of your email. Please include “CSUS 848” in all email subject lines.

Cellphones
You are allowed to maintain cellular devices in a silent mode during this course, in order to receive emergency SMS text, phone or email messages distributed by the university. You are not supposed to be texting or sending emails during class. This is a collective action problem, calls, texts and emails only “benefit” you, but cause a big discomfort to others. So please don’t.
Academic Integrity:
Article 2.III.B.2 of the Academic Freedom Report states: “The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards.” In addition, the Department of Sustainability adheres to the policies on academic honesty specified in General Student Regulation 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations.

Therefore, unless authorized by your instructor, you are expected to complete all course assignments, including homework, tests and exams, without assistance from any source. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the www.allmsu.com Web site to complete any course work in this course. Students who violate MSU regulations on Protection of Scholarship and Grades will receive a failing grade in the course or on the assignment. Contact your instructor if you are unsure about the appropriateness of your course work. (See also http://www.msu.edu/unit/ombud/dishonestyFAQ.html). **There will be no warnings – the maximum sanction allowed under University policy will occur on the first offense.** Turnitin.com will be used for all written assignments.

Accommodations for Students with Disabilities
Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at rcpd.msu.edu. Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation ("VISA") form. Please present this form to an instructor during the second week of class and/or two weeks prior to the accommodation date (test, project, etc.). Requests received after this date may not be honored.

Bereavement
Michigan State University is committed to ensuring that the bereavement process of a student who loses a family member during a semester does not put the student at an academic disadvantage in their classes. If you require a grief absence, you should complete the “Grief Absence Request” web form (found at https://www.reg.msu.edu/sitemap.aspx?Group=7) no later than one week after knowledge of the circumstance. I will work with you to make appropriate accommodations so that you are not penalized due to a verified grief absence.

Disruptive Behavior
Article 2.III.B.4 of the Academic Freedom Report (AFR) for students at Michigan State University states: "The student's behavior in the classroom shall be conducive to the teaching and learning process for all concerned." Article 2.III.B.10 of the AFR states that "The student has a right to scholarly relationships with faculty based on mutual trust and civility." General Student Regulation 5.02 states: "No student shall . . . interfere with the functions and services of the University (for example, but not limited to, classes . . .) such that the function or service is obstructed or disrupted. Students whose conduct adversely affects the learning environment in this classroom may be subject to disciplinary action through the Student Faculty Judiciary process.

Campus Emergencies
In the event of an emergency arising within the class, the Professor will notify you of what actions may be required to ensure your safety. It is the responsibility of each student to understand the evacuation, “shelter-in-place,” and “secure-in-place” guidelines posted in each facility and to act in a safe manner. You are allowed to maintain cellular devices in a silent mode during this course, in order to receive emergency SMS text, phone or email messages distributed by the university. When anyone receives such
a notification or observes an emergency situation, they should immediately bring it to the attention of the Professor in a way that causes the least disruption. If an evacuation is ordered, please ensure that you do it in a safe manner and facilitate those around you that may not otherwise be able to safely leave. When these orders are given, you do have the right as a member of this community to follow that order. Also, if a shelter-in-place or secure-in-place is ordered, please seek areas of refuge that are safe depending on the emergency encountered and provide assistance if it is advisable to do so.

**Title IX**

"Michigan State University is committed to fostering a culture of caring and respect that is free of relationship violence and sexual misconduct, and to ensuring that all affected individuals have access to services. For information on reporting options, confidential advocacy and support resources, university policies and procedures, or how to make a difference on campus, visit the Title IX website at www.titleix.msu.edu."

**Limits to Confidentiality**

Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University’s student record policies. However, students should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues based on external legal obligations or that relate to the health and safety of MSU community members and others. As the instructor, I must report the following information to other University offices if you share it with me:

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child,
- Allegations of sexual assault or sexual harassment when they involve MSU students, faculty, or staff, and
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. If you would like to talk about these events in a more confidential setting you are encouraged to make an appointment with the MSU Counseling Center.

**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.
1. January 11: Introduction to the class

2. January 18: Human and natural system interactions

Required:

Recommended:

3. January 25: The role of natural resources in rural livelihoods systems

Required:


**Recommended:**


See the special issue of World Development (Volume 64, Supplement 1, December 2014) on Forests, Livelihoods, and Conservation. *The required article by Angelsen et al. is part of that special issue. All the articles are available electronically on the MSU Library web page. Some of them come up later in the semester.*

4. **February 1: Definition of institutions and their role in natural resource management**

**Required:**

Berman, R., Quinn, C., & Paavola, J. (2012). The role of institutions in the transformation of coping capacity to sustainable adaptive capacity. *Environmental Development, 2*(1), 86–100. [https://doi.org/10.1016/j.envdev.2012.03.017](https://doi.org/10.1016/j.envdev.2012.03.017)


**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 8. Environmental values, risks and perceptions

**Required:**


**Recommended:**


6. February 15. Property rights regimes: overview

**Required:**


**Recommended:**


7. February 22: Management of Natural Resources: an introduction

**Required:**


**Recommended:**


**Required:**


**Recommended:**


(Research):


The International Journal of the Commons publishes two issues per year in topics relevants to the commons. In addition, the Digital Library of The Commons offers open access to thousands of articles on the topic of the commons.

March 8: Spring break

9. March 15: Gender and Resource Management

Required:


**Recommended:**


**March 22: Encouraging conservation where benefits are off-site: overview**

**Required:**


**Recommended:**


10. March 29: Promoting cooperation through community development and growth of social capital

**Required:**


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


**These focus on organizing communities:**


11. April 5: 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:**

*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.*


Required:

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


Recommended:


13. April 19. Payments for environmental services

**Required:**


**Recommended:**


14. **April 26. Tourism, conservation, and local livelihoods**

**Required:**


**Recommended:**


16. May 3: Students presentations