



Human Rights and the Environment: Rivers, Dams, and Local Struggles

(Political Science/Ecology)
Spring Semester, 2011

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COURSE OVERVIEW

This course examines the links between human rights and the environment. These are issues that touch on the core problems of sustainability, especially in Southeast Asia and countries of the “Global South.” There are a large range of issues of concern within this area including the environmental and social changes related to local, national, international, and corporate conflicts over resource management.

We will focus on a specific and globally significant issue—the environmental and social impact of dams. After a week in the classroom looking at the theory and background of human rights and the environment, we will direct our field studies to three river ecosystems—the Yom, tributaries of the Mekong River, and the Mekong. The Yom River is in the north and for the almost 20 years has been the target for a large dam project at Kaeng Sua Ten National Park in Phrae province. The Nam Theun tributary of the Mekong is home to a large hydroelectric dam (Theun Hinboun) which is being expanded and is part of the Laotian government’s plan to make Laos the “Battery of Southeast Asia.” The Mekong River is the fifth largest river in the world, flowing from Tibet through and past China, Burma, Laos, Thailand, Cambodia and Vietnam. It is one of the most difficult cross-boundary river resource management problems in the world, tied to the commerce, livelihoods, transportation, biodiversity, and the hydro-energy dreams of the six countries through which it runs. The people whose livelihoods are tied to these river systems will play a significant role in teaching this course.

OBJECTIVE

By the end of the course, students will better understand the major issues surrounding the issues of human rights and the environment. Students will gain specific knowledge and understanding of the linkages between human livelihoods and the river ecosystem, local ethno-biological knowledge of stream ecology, impacts from dam construction, actors vying over the control of natural resource management, and mobilization of grassroots movements in national-level and international-level politics concerning river development in Thailand and Southeast Asia.

LEARNING OUTCOMES

Upon completion of the course, students will be able to:

- Explain the key issues and interconnections between human rights and the environment
- Outline the ecological impacts of dams on riparian ecosystems
- Describe the social impacts of dams on community livelihood and survival
- Trace the ideologies, history, and policies of dam construction in Thailand and neighboring States
- Identify the sociological dynamics related to river fishing in Northeastern Thailand
- Summarize the motivations and interests of key actors in the renewed interest in dam construction on the Mekong
- Critically assess the various “pathways of development” the Mekong River may take and prognosticate the future of one of the world’s last great free-flowing waterways
- Conduct sociological survey methods, including village-level surveys of fishermen and farmers
- Successfully use tools of field research, including the usage of a GPS during river travel and village surveys, ability to carry out basic socioeconomic surveys in Thai, etc.
- Explain the political struggles for community survival and people’s movements in Thailand
- Create and support an ethical position relating to the large dam controversy
- Demonstrate proficiency in expedition skills for river studies, especially down-river canoeing and river navigation
- Develop and utilize self and group leadership skills in an experiential learning setting.

GRADING AND ASSESSMENT

Participation

10 %

Participation in this class means doing the reading, participating in discussions, and being an active member of the course. This is not limited to the time in the formal classroom or during seminar! Participation means talking with villagers, asking questions, getting “into” the field activities and work, and playing an active role in the host families and communities of which we will be a part.

Expedition skills

10 %

Expedition skills entail: being competent in working together in a group, demonstrating technical skills, appropriately managing risk, sharing the leadership, and being an active follower, as well as being able to safely travel and learn in the varied environments where the course takes place. Additionally, during the course, you will each have the opportunity to co-lead the group for a three-day block as a designated “Leader of the Day.” Leadership at ISDSI means timely, appropriate actions that guide and support your group to set and achieve realistic goals. Great leaders create an environment that inspires individuals and groups to achieve their full potential. Students designated as Leader of the Day will join the EFC Instructor Team in facilitating the day’s activities, managing peer dynamics, and leading reflective group meetings.

Field guide

10 %

Each student needs to complete a personal field guide of the ecology, fish, habitat, river morphology, etc. encountered during the course. Blank field guides will be handed out as a separate book at the beginning of the course and should be filled in as you encounter flora and fauna. Each EFC will include a field guide component that will build off of the completed field guides from the previous EFC. Consistency in completing field guides is key.

Field notes

5 %

You need to take legible, well organized field notes. This is an important skill you will learn on the course, and field notes should be taken for both ecological and sociological information. You need to record in a consistent way what you are observing each day through descriptive observations, and demonstrate that you are able to process and understand your experience by interpretative analysis.

Reflections (5)

10 %

Five times throughout the course, students should think and write two pages about a significant connection made between culture, ecology and the focus of the course in a Reflection. Re-read your observations and interpretations from the day, fill in details, ask further questions, then write a short reflection about something that made a significant impact on your thinking about a particular connection or idea.

Focused Reflections (5)

10%

On five days throughout the course, a topic will be provided by an instructor. These “focused reflections” should be 2 pages in length and address the following prompts:

Focused Reflection #1 (Field Module 1): What should be the interaction between ecology and cultural use for a “healthy, working river”? What aspects of this have you seen on the Yom?

Focused Reflection #2 (Field Module 2): What are some of the similarities and differences between development workers and agencies (multilateral, bi-lateral, NGO, etc.) tasked with “the sustainable development of the Mekong”? Which type, in your opinion, is the most effective? Why?

Focused Reflection #3 (Field Module 2-3): Is Lao PDR warranted in building dams to become the “Battery of Asia”? Why or why not should these dams continue to be built? What regulations should be put in place to safeguard environmental and cultural identity?

Focused Reflection #4 (Field Module 3): Give examples and evidence for the best way(s) for villages and villagers to preserve their environmental and cultural identities. How should this/these tactics be implemented?

Focused Reflection #5 (Leadership): Throughout the duration of your three day block, at which of the seven leadership skills did you most excel and with which do you feel you have the most room for growth? In what tangible ways did your pre-block planning aid the overall success of your leadership block, and how did you continue to build upon your plans while actively leading? Which of the designated leader tasks do you need to improve upon the most for your next block? Provide two to three short examples of how you positively enacted the

various responsibilities of a leader. (For all of the above, use the back cover of the ISDSI journal as a reference and guide.)

Essay 1: Foundational essay

10%

Due at 5PM the end of class the first Friday of the course, this essay will integrate the theories and concepts studied during the first week. Students will be given a specific question during the first week of seminar and should consider the issue in the broader context of rivers and watersheds when answering the question. 5-6 pages.

Field module assignments

This EFC has three (3) field modules, the first focusing on the Yom River, a site of resistance and conservation in the wake of (renewed) dam-building interests in Thailand; the second focusing on transboundary political ecology and actors tasked with the “sustainable development” of the Mekong River and its tributaries; and the third focusing on the Mekong River watershed and controversial mainstream dam construction. Combined field modules one and two will culminate with a handwritten essay of 5-7 pages, and module three will provide a chance for you to write and reflect upon on a specific issue of interest to you. The goal for both essays is to utilize the integration of experiential and scholarly learning methods while clearly and succinctly expounding upon your main points.

- **Essay 2: The interaction of people and rivers essay**

15%

The major thrust of the first two modules focuses on the study of people and their interaction with river ecosystems. Questions that your essay should answer: How do people use and impact rivers? How does the river impact people’s daily lives? What are some of the key issues with access to river resources and management (local, national, and international)? The essay is due by 5PM on Sunday the 27 of February and should be 5-7 hand-written pages in your notebook.

- **Essay 3: Mekong essay**

20%

By the end of the semester, you will have spent nearly two weeks in close proximity to the Mekong River and part of its watershed. You will have witnessed many struggles over and competing narratives about the future and “sustainable development” of this great watershed. This is an open essay for you to focus on a particular topic or a particular connection that has had an impact on your thinking about this watershed. Explore this topic in detail through the lens of both experience and scholarly readings, and prognosticate what you think the future of this watershed entails. At the end of your essay, spend a little time relating your topic to your life back in the United States. Be sure to cite course articles, interviews, and first-hand experiences to support your point. The essay is due at the start of the Final Seminar on Thursday, the 10 of March and should be 7-9 hand-written pages in your notebook.

EXPECTATIONS

Seminar is 1:00-4:00 p.m. M-Th and 9:00-12:00 a.m. on Friday the first week. Please be prompt.

In order for a course like this to be a success, it requires the full participation of all members of the course. While it is true in any context, given what we are studying, the phrase “you get out what you put in” is especially relevant – learning about sustainability in this context will be an interactive on-going learning process.

During class and in the field, students are expected to ask questions during guest lectures, field activities and other learning opportunities. Active learning—asking questions, taking notes, exploring new ideas and concepts, talking with local people—are all required to do well in this course.

Each student will be given a copy of “**Slithering South**” by Steve Van Beek and will be expected to have the book read by the end of the course. This is an excellent travelogue about one man’s quest to boat through Thailand from the Golden Triangle to the Sea, and you should find it an enjoyable and enlightening read.

A note on essays in the field journals: The essays, and your journal in general, need to be legible and neatly presented. It is VERY important that the instructor can read it with no difficulty within the constraint of time and environment during the EFC. If the instructor can’t read it, it will not get graded! **No pencil!** (Pencil is hard to read and will smudge.)

A note on citations in the field journals: Be sure to cite your sources within your essay- both print material and firsthand interviews. Also, make a list of your sources—including written records of direct observation (e.g. your field notes)—at the end of the essay. If you reference your field notes, cite the date.

***And a note from Ajaan Abram:** The emphasis during week 1 is context, concepts, and theory. The emphasis during weeks 2-4 is more on applying theory to the reality of rivers and the biological and sociological systems of which you will be a part. The “text” for the course during weeks 2-4 includes the rivers, dams, and communities that you will be studying. Rather than mediated through reading a prepared text, you will be involved **directly** in learning the subject matter. This will be challenging, as direct learning is more difficult—there is no author who has pre-formatted or organized the material for you. Part of what you will be learning in this course is how to collect and analyze information yourself. Many of these field activities have never been attempted before; therefore, we ask you to be flexible and gracious with your instructors, your hosts, your time, and your expectations. We will learn as much from this field course as you will be learning! I believe that firsthand experiences of differing viewpoints are of vital importance to objectively making value judgements about issues; therefore, you will be exposed to many differing points of view during this course. Remember that you will be guests in many homes, to a multilateral organization, in a different country, and to a private company- Please always be gracious, *riep roi*, and eager to ask objective questions, even if you disagree with the information and motivations and of your hosts. We, as an instructional team, will help guide your thinking and learning, but we want you to ultimately make your own judgments and decisions about often divisive issues. An ounce of grace will go a long way!*

SCHEDULE AND READING LIST

INTRODUCTORY SEMINAR: GLOBAL CONTEXT OF HUMAN RIGHTS, DAMS AND ECOLOGY

**2/15 Monday 1:00-3:15 PM Human Rights, the Environment and the Earth Rights Framework
3:30-4:00 PM Introduction to Ecosystem Ecology 1**

Reading:

Picolotti, R., and J. D. Taillant. 2003. “Introduction” In: *Linking Human Rights and the Environment*. Tucson, Arizona: The University of Arizona Press.

Picolotti, R. 2003. “Agenda 21 and Human Rights.” In: *Linking Human Rights and the Environment*. Tucson, Arizona: The University of Arizona Press.

Greer, J. and T. Giannini. 1999. *Earth Rights: Linking the Quests for Human Rights and Environmental Protection*. Washington, D.C.: Earth Rights International. Chapters: Intro, 2, 3, 5, 8, & 11.

**2/16 Tuesday 1:00-3:15 PM Dams and Rivers and the Tragedy of the Commons
3:30-4:00 PM Introduction to Ecosystem Ecology 2**

Reading:

Hardin, G. 1968. “The Tragedy of the Commons.” *Science* 162:1243-1247.

The Ecologist. 1992. “The Encompassing Web: The Ramifications of Enclosure.” *The Ecologist* 22(4): Pp.131, 149-155.

McCully, P. 2001. “A New Order for Rivers and Society: The World Commission on Dams, and Beyond” In: *Silenced Rivers: The Ecology and Politics of Large Dams*. London: Zed Books.

**2/17 Wednesday 1:00-1:45 PM Environmental and Human Impacts of Dams
1:45-3:20 PM Nat Geo Video: “Rivers and Life: The Yangtze”
3:30-4:00 PM Stream Ecology 1: Morphology and Hydrology**

Reading:

McCully, P. 2001. “Empty Promises: The Elusive Benefits of Large Dams” In: *Silenced Rivers: The Ecology and Politics of Large Dams*. London: Zed Books.

McCully, P. 2001. “Temples of Doom: The Human Consequences of Dams” In: *Silenced Rivers: The Ecology and Politics of Large Dams*. London: Zed Books.

**2/18 Thursday 1:00-3:15 PM The Interface of Dams and People: Social Movements
3:30-4:00 PM Stream Ecology 2: Aquatic Biology**

Reading:

Bryant, R., and S. Bailey. 1997. "Grassroots Actors" In: *Third World Political Ecology*.
Phongpaichit, P. 2002. "Social Movements in Thailand." In: *Proceedings of the International Conference on Thai Studies*, Nakhon Phanom.

2/19 Friday 9:00-10:30 AM Hot Topics: GHG Emissions and Future Directions
10:45 AM-11:30 PM Leadership Curriculum
11:30 AM-12:00 PM Field Module Briefing
Essay 1 due 5:00 PM

Reading:

Makinen, K. and S. Khan. 2010. "Policy Considerations for Greenhouse Gas Emissions from Freshwater Reservoirs." *Water Alternatives* 3(2): 91-105.
Totten, M. P., T. J. Killeen, and T. A. Farrell. 2010. "Non-dam Alternatives for Delivering Water Services at Least Cost and Risk." *Water Alternatives* 3(2): 201-230.

FIELD MODULE 1: DON CHAI VILLAGE AND THE YOM RIVER: RESISTANCE AND CONSERVATION

2/20 Sunday Travel day: Chiang Mai To Don Chai
Depart from Huay Kaew Shell Station

Reading:

Connell, M. 2000. "How our Cultural Perceptions of Rivers Shape our Impact on Rivers." Sussex Society for Public Interest. July 5, 2000. Retrieved from <http://www.elements.nb.ca/Theme/artists>.
Rajesh, N. 1997. "Local Participation and the Kaeng Sua Ten Dam Controversy." *Watershed* 2(3): 17-25.

2/21 Monday Don Chai Village exploration and homestay

Reading:

Dudgeon, D. 1999. "Anthropogenic Threats" In: *Tropical Asian Streams: Zoobenthos, Ecology, and Conservation*. Hong Kong: Hong Kong University Press, Pp. 519-549.

2/22 Tuesday Traditional fishing practicum: paws set fishing nets at night; Don Chai Village homestay

Reading:

Bunn, S. E., and Arthington, A. H. 2002. "Basic Principles and Ecological Consequences of Altered Flow Regimes for Aquatic Biodiversity." *Environmental Management* 30:492-507.

2/23 Wednesday Yom River transect and ecology activities: Yom indigenous fish identification; paddle upstream to rapids; lunch at rapids; ecology activities; goodbye dinner with host families; Don Chai Village homestay

**FIELD MODULE 2: LAOS: ACTORS INVOLVED WITH TRANSBOUNDARY POLITICAL
ECOLOGY ON THE MEKONG RIVER AND ITS TRIBUTARIES**

2/24 Thursday Travel from Don Chai, Thailand, to Vientiane, Laos

Reading:

Phnom Penh Post. 2008. "Lao Dams Muddying the Waters." *Probe International*. Retrieved from www.probeinternational.org.

Ong, L. 2007. "Laos Plans a Water-powered Future." *BBC News*. Retrieved from <http://news.bbc.co.uk>.

**2/25 Friday Multilateral organizations shaping the "Sustainable development of the Mekong River": Symposium at the Mekong River Commission Secretariat
*Please wear student uniforms and be punctual***

Reading:

Hirsch, P. 2010. "The Changing Political Dynamics of Dam Building on the Mekong." *Water Alternatives* 3(2): 312-323.

**2/26 Saturday Non-Governmental Organizations (NGO's) and their role in development related to marginalized peoples: Meeting with Mike Fennema from CRWRC (AM);
Mid-course seminar reflection/integration (PM)**

Reading:

Hirsch, P. 2006. "Governing Water as a Common Good In the Mekong River Basin." *Transforming Cultures eJournal* 1(2). Retrieved from <http://epress.lib.uts.edu.au/journals/TfC>.

2/27 Sunday Catch-up day; guided exploration of Vientiane; essay 2 due by 5PM

**2/28 Monday Dams for power generation and flood control: visit to Theun-Hinboun Dam and Expansion Project with accompanying guide, Garry Oughten from EcoLao;
overnight near dam site**

Reading:

Theun-Hinboun Power Company. 2010. Various readings from the THPC Website. Retrieved from www.thpclaos.com.

Vongsay, P. 2010. "Powering Progress: Theun-Hinboun Hydropower Expansion on Schedule." *Vientiane Times*, August 11, 2010. Retrieved from: www.poweringprogress.com.

Banktrack. 2008. "Theun-Hinboun Expansion Project." Retrieved from: www.banktrack.org.

IRN. International Rivers Network. 2008. "Theun-Hinboun Dam Nightmare Revealed: Resettlement Plan and EIA Riddled with Flaws." Retrieved from www.internationalrivers.org.

3/1 Tuesday Rebuilding livelihoods after the dam: visit to resettlement village and livelihoods restitution projects; return and overnight in Vientiane

Reading:

WBG. World Bank Group. 2009. "Directions in Hydropower." Retrieved from www.siteresources.worldbank.org.

IRN. International Rivers Network. 2009. "New Directions in Hydropower?" Retrieved from www.irn.org.

IRN. International Rivers Network. 2010. "The Hydropower Sustainability Assessment Protocol." Retrieved from www.irn.org.

**FIELD MODULE 3: MEKONG RIVER: WATERSHED EXPLORATION
AND MAINSTREAM DAM DEVELOPMENTS**

- 3/2 Wednesday Travel day: Vientiane, Laos, to Chiang Khan, Thailand; overnight at guesthouse**
- Reading:**
IRN. International Rivers Network. 2008. "Social and Environmental Standards for Large Dams."
Retrieved from www.irn.org.
- 3/3 Thursday Paddle Mekong River: Chiang Khan to Pak Chom; overnight at guesthouse**
- 3/4 Friday Proposed Mekong mainstream dam effects on villages: paddle Mekong River from Pak Chom to Ban Kok Wow; meet P' Sawit and grassroots resistance organizers; homestay at Ban Kok Wow**
- Reading:**
Manpati, T. 2009. "The Effects of Pak Chom Dam on Local Food Security in Kok Wao Village."
Presentation for Mekong School, November 12, 2009. Retrieved from
www.aseanyouthmovement.org.
- 3/5 Saturday Village exploration and activity day: visit proposed Pak Chom dam site; visit agricultural plots; meet with community activists; homestay at Ban Kok Wow**
- Reading:**
Meynell, P.-J. and L. J. M. Haas. 2010. "Profiles of 12 Proposed Mainstream Developments in the LMB." Presentation for *MRC SEA of Mekong Mainstream Hydropower Regional Impacts Assessment Workshop*. Vientiane, 2010. Retrieved from www.mrcmekong.org.
- 3/6 Sunday Paddle Mekong River: Ban Kok Wow to Sangkhom; overnight in guesthouse**
- Reading:**
Stone, R. 2010. "On China's Beleaguered Yangtze, A Push to Save Surviving Species." *Yale Environment 360*. August 23, 2010. Retrieved from www.e360.yale.edu.
- 3/7 Monday Paddle Mekong River: Sangkhom to Si Chiang Mai; overnight in guesthouse**
- Reading:**
Eaton, K. 2011. "100% Renewable Energy in 40 Years Not Limited to Our Wildest Dreams: Study." *FastCompany.com*. January 27, 2011. Retrieved from <http://www.fastcompany.com>.
- 3/8 Tuesday Paddle Mekong River: Si Chiang Mai to Nong Khai; overnight in guesthouse**
- 3/9 Wednesday Travel day: Nong Khai to Chiang Mai**
- 3/10 Thursday 9:00-11:00 AM Final Seminar / reflection and integration / discussion of "Slithering South"; Essay 3 due at 5PM**

ADDITIONAL SUGGESTED READINGS

- Bednarek, A. T. 2001. "Undamming rivers: A review of the ecological impacts of dam removal." *Environmental Management*, 27(6):803-814.
- Coates D., Ouch Poeu, Ubolratana Suntornratana, N. Thanh Tung & Sinthavong Viravong. 2003. "Biodiversity and fisheries in the Lower Mekong Basin." *Mekong Development Series No. 2*. Phnom Penh: Mekong River Commission.
- De Silva, S. S., T. T. T. Nguyen, N. W. Abery, and U. S. Amarasinghe. 2006 "An evaluation of the role and impacts of alien finfish in Asian inland aquaculture." *Aquaculture Research*, 37:1-17.
- Forsyth, T. 2004. "Social movements and environmental democratization in Thailand." In: Jasanoff, S. and M. Long (eds.) *Earthy Politics: Local and Global in Environmental Governance*. Cambridge, Massachusetts: MIT Press.
- MRC. 2005. "Overview of the hydrology of the Mekong Basin." Vientiane, Lao PDR: Mekong River Commission.
- MRC. 2007. "Diagnostic study of water quality in the Lower Mekong Basin." *MRC Technical Paper No. 15*. Vientiane, Lao PDR: Mekong River Commission.
- Oopatham Pawaputanon and Na Mahasarakarm. 2007. "An introduction to the Mekong fisheries of Thailand." *Mekong Development Series No. 5*. Vientiane, Lao PDR: Mekong River Commission.
- Poulsen, A. F., K. G. Hortle, J. Valbo-Jorgensen, S. Chan, C. K. Chhuon, S. Viravong, K. Bouakhamvongsa, U. Suntornratana, N. Yoorong, T. T. Nguyen, & B. Q. Tran. 2004. "Distribution and Ecology of Some Important Riverine Fish Species of the Mekong River Basin." *MRC Technical Paper No. 10*. ISSN: 1683-1489. Vientiane, Lao PDR: Mekong River Commission.
- Smith, T. M., & R. L. Smith. 2006. *Elements of Ecology* (6th ed.). San Francisco: Benjamin Cummings.
- Chapter 3 Climate
 - Chapter 20 Ecosystem Energetics
 - Chapter 21 Decomposition and Nutrient Cycling
 - Chapter 22 Biogeochemical Cycles
- Van Dyke, F. 2008. "The Problem of Moral Value: Assigning Intrinsic Values in Conservation." *Conservation biology: Foundations, concepts, applications* (2nd ed.). Springer.
- Vorosmarty, C.J., P.B. McIntyre, M.O. Gessner, D. Dudgeon, A. Prusevich, P. Green, S. Glidden, S.E. Gunn, C.A. Sullivan, C.R. Liermann, and P.M. Davies. 2010. "Global Threats to Human Water Security and River Biodiversity." *Nature* 467:555-561.