PhD Course in

Environment, Expertise and Development

August 11-14, 2014

Venue

The Faculty of Science, University of Copenhagen, Frederiksberg Campus, Denmark

Convened and organized by:

The Department of Food and Resource Economics University of Copenhagen, Denmark

Currently, "the environment" takes a range of representational forms in the academy, applied policy contexts and the media. Concerns are raised about the loss of biodiversity, the irreversibility of climate change, the threat of deforestation and environmental degradation, water supply, the conservation of wildlife, and future energy supply just to name a few. Common for all these concerns is that they are intricately linked to issues of development of humans and societies. Also common for them is that what we know about their causes and effects is shaped and defined by what scientists and experts tell us. However, knowledge always comes from somewhere and is the product of particular ways of viewing the world. To know the environment, is to come to terms with how multiple actors and regimes of expertise make and assert knowledge claims about it. This contestation about authoritative knowledge is inseparable from the larger institutional landscape of governance of the environment and society at large, which constitutes the interface we often refer to as the "politics of nature". How boundaries are drawn and crossed between the domains of science and politics is a central theme, which will run through the course.

In this course we shall draw on a series of interdisciplinary works to explore and come to grips with different ways of knowing the environment such as indigenous ecological knowledge, local knowledge, legal knowledge, economical knowledge, scientific knowledge, etc. from a critical perspective. Our point of departure is Political Ecology (PE), which emerged as a distinct field in early 1970s and propagates an understanding of environmental crisis and conflict as being locally situated, but linked to larger-scale processes and forces. Present day theorizing and empirical research by scholars within political ecology remain interested in global to local power differentials, but has productively borrowed from science and technology studies (STS) when approaching the role of scientific knowledge in the politics of international conservation, development policy, environmental assessments and claims to "natural resources". Of late, a new body of literature intersecting PE and STS has emerged and contributed significantly towards reimagining development and the politics of natures in the global South. This seminar will introduce and draw on key readings from this emergent field.

Major themes covered: The "co-production" of natural and social orders; the linear model/deficit model in science-society; the concept of boundary making; political ecology and environmental knowledge; indigenous vs. scientific knowledge; the politics of conservation; participatory forms of forestry and knowledge making; assessing outcomes and impacts, post-coloniality and science studies, environmentalism, ethnographies of bureaucracies governing "nature".

The **specific learning outcomes** for the course are:

- 1. Participants will identify and differentiate different ontological and epistemological assumptions in academic literatures
- 2. Participants will become aware of key issues and debates concerning expertise in relation to development and environment
- 3. Participants will critically read and discuss research and scholarly work of other researchers

The **learning activities** comprise:

In **advance** of the course:

- 1. Participants must read the course curriculum
- 2. Participants are required to prepare an individual course essay
- 3. Participants must prepare written comments to the essays of their three fellow group members

During the course:

- 1. Paper seminar: the 20 participants are divided into five groups each of which is assigned a senior lecturer. The groups meet three times; the first two times to discuss the four papers that participants have submitted in advance of the course and the third time to discuss how participants will change their papers in response to the comments they have received and what they have learned during the course. Each session is two hours.
- 2. The 12 lectures will blend theoretical/conceptual perspectives presenting a theory, an argument, or an overview of a debate of relevance to the course topic with case based studies. In the course of the lectures, you will learn that there are no "naked facts" in social science; all our observations of sociality and nature are theoretically informed. On the other hand, social science is thoroughly empirical and historically informed and hardly ever "pure theory". The 12 lectures will illustrate this in various ways: What is a theory? How is a research question interrogated and answered through a case study? What methodological and analytical toolkits are at hand and how are they deployed vis-à-vis different bodies of material? These and other foundational questions will be covered in various ways by the 12 lectures.
- 3. Lunches: We have 1½ hour long lunches that are meant to be used for more than eating. Do take advantage of them to interact with fellow participants and the lecturers.

Arun Agrawal

Arun is professor in the School of Natural Resources & Environment (SNRE) at the University of Michigan. His research and teaching emphases are on the politics of international development, institutional change and environmental conservation. He has written extensively on issues related to indigenous knowledge, community-based conservation, common property, population and resources, and environmental identities. Recent interests include the decentralization of environmental policy, and the emergence of environment as a subject of human concern.

Christian Lund

Christian is professor in Development and Natural Resources Governance at University of Copenhagen. He has a keen interest in discussions about the state and politico-legal institutions, and the ways in which social action produces institutions of public authority. His research focuses on local politics and state formation: in particular socio-legal processes of conflict and their relationship to policy and politics as well as institutional arrangements pertaining to property and natural resource management.

Jens Friis Lund

Jens is associate professor in forest governance in developing countries at the University of Copenhagen. His research has focused on issues of political economy, livelihoods, equity, monitoring, conservation, taxation, and micro-level politics around processes of environmental governance, in particular of forests, in the global South. Presently, Jens is embarking on a research agenda to understand the role of expertise in shaping resource access, management, and governance processes in relation to forests and conservation areas.

Andrea Nightingale

Andrea is an Associate Professor in the School of Global Studies, University of Gothenburg, Sweden. Her PhD from the University of Minnesota in Geography was based on work done in Nepal since 1987 on questions of development, natural resource management, community forestry, gender, social inequalities and governance. Her academic interests include pioneering work on socio-natures, critical development studies, and methodological work on mixing methods across the social and natural sciences.

Mattias Borg Rasmussen

Mattias received his phd in anthropology from the University of Copenhagen in December 2012. A member of the Waterworlds project on climate change, Mattias has been working on community water politics in the Peruvian Andes. He is currently employed as a post doc at the Section for Global Development at the Department of Food and Resource Economics, University of Copenhagen, working on a project entitled 'Politics of Property' regarding highland peasant communities and their relation to state-led conservation efforts in Peru's Cordillera Blanca.

Jesse Ribot

Jesse is professor of Geography at the Department of Geography, University of Illinois at Urbana-Champaign. His research interests include; decentralization and democratic local government; natural resource tenure and access; distribution along natural resource commodity chains; and household vulnerability in the face of climate and environmental change. He is currently leading an initiative on Social Dimensions of Environmental Policy at the School of Earth, Society and Environment which is also supported by the Beckman Institute.

Martin Skrydstrup

Martin is a postdoctoral fellow at the Dept. of Food & Resource Economics, Section for Global Development. He holds a PhD in cultural anthropology from Columbia University and a MA in cultural anthropology from the University of Copenhagen. His research interests revolve around regimes of environmental expertise in colonial and post-colonial Kenya.

Participant requirements

The course is open to all PhD students with a maximum of **20 participants**. The course is particularly relevant for PhD projects that focus on the nexus of natural resource management and human society, in relation to issues of sustainability, climate adaptation, or resource access and conflicts.

There will be a **course fee** for participants. PhD students registered at Danish universities that are part of the 'Open market' for PhD courses, and at NOVA universities will be required to pay a fee of €150 Other participants will be required to pay a fee of €300.

Participants will be required to cover their own accommodation and transport to the course location. Upon admission to the course, participants will be provided with information on accommodation options.

To register for the course, one must submit an **abstract** of maximum 800 words to Martin Skrydstrup (mchs@ifro.ku.dk) by **March 1, 2014** stating the project title, objectives, theoretical background, research methods, country of field work, stage of PhD project (i.e. recently commenced, pre-fieldwork, post-fieldwork, etc.) and how attending this course will benefit your project. In this email, potential participants must also indicate if they intend to pay the course fee from their personal account or through an institutional account, for purposes of invoicing. In the former case, participants must supply their full private address and a telephone number. In the latter case, participants must supply their full institutional address and a direct (i.e. individual as opposed to the overall institutional) telephone number.

Letters of acceptance will be emailed to participants no later than **March 15**, **2014**. A full programme for the course, including readings, will be emailed to participants no later than **April 1**, **2014** and participants will then be required to submit a **course paper** of no more than 3,000 words (excl. references) by **July 1**, **2014**. Participant papers should address themes from the literature and how these relate to the participants' own research. Participants should frame their papers according to the relevant stage in their research process in order to maximise the relevance of the paper to their individual project outcomes and milestones (i.e. participants in earlier stages of research may find it more relevant to discuss the literature in relation to research design, while those in the final stages may find it more relevant to use the paper to draft an article). Due to the limited word count, less relevant background and introduction to the project should be avoided, allowing for a more thorough discussion related to the literature. This will also allow for greater feedback during the course. Further guidance on the paper will be emailed to the participants upon admission.

By **July 15, 2014**, participants will be divided into five groups based on their papers. Participants will then be required to read and **prepare written comments** to the papers of the three other group members (five groups of four participants each). These written comments, the participants email to the other members of their group (incl. the assigned lecturer) no later than August 5, 2014.

Upon completing all the above course activities, participants will be awarded **6 ECTS** credits and a course certificate.

Groups and rooms for 'participant paper' sessions

Group Jesse Ribot: meeting room 'Skoven'

Marijana Vukotic Mbunya Francis Nkemnyi Eliezeri Sungusia Numan Amanzi

Group Andrea Nightingale: meeting room 'Byen'

Ellinor Isgren Lily Salloum Lindegaard Bijendra Basnyat Jevgeniy Bluwstein

Group Arun Agrawal: meeting room 'Engen'

Srijana Baral Clare Tompsett Michele De Rosa Sabrina Tomasini Anouck Bessy

Group Christian Lund: 'Von Langen'

Helmut Gezius Joeri Scholtens Rina Mardiana Yvonne Kunz

Group Jens Friis Lund: 'Lunch room'

Dian Yusvita Intarini Annemiek Pas Schrijver Isaías Daniel Hinojosa Flores Marie Ladekjaer Gravesen Ulrika Waaranperä

All rooms are on this address:

Rolighedsvej 23 (new building behind the building facing the road), DK-1958 Frederiksberg C.

Day 1 - August 11, 2014

Time		'Venue' /
Time		Lecturers
08.30 – 09.00	Arrival and morning coffee	'Von Langen'
09.00 – 09.45	Welcome and introduction to the course Introduction to the course	'Von Langen'
		Jens Friis Lund
09.45 – 11.00	<u>Lecture 1:</u> Situated Knowledges and Partial Perspectives: Ways of seeing and knowing 'nature'	'Von Langen'
		Andrea Nightingale
11.00 – 11.20	Coffee	
11.20 – 13.00	Lecture 2: Vulnerability in the Sahel: Justice and the Causes of Risk	'Von Langen'
		Jesse Ribot
13.00 – 14.00	Lunch:	
14.00 – 15.15	<u>Lecture 3:</u> Of what is this a case? Thinking through the concrete, the abstract, the specific and the general	'Von Langen'
	general, the massimes, the specific and the general	Christian Lund
15.15 – 15.30	Coffee	
15.30 – 17.30	Participant paper session 1: Two papers discussed	
	Find your group and room on page 5	
17.30 – ??.??	Walk to restaurant Höst and dinner there (paid for by organ	nizers)

Day 2 – August 12, 2014

Time		Venue /
08.30 - 09.00	A prival and marning anffor	'Von Langen'
08.30 - 09.00	Arrival and morning coffee	Von Langen
09.00 - 10.15	Lecture 4: Getting to the Sociocene: Beyond an	'Von Langen'
	Instrumental Sociology of Risk	
		Jesse Ribot
10.15 - 10.30	Coffee	
10.30 - 11.45	<u>Lecture 5:</u> Justifications & key evaluative strategies of	'Von Langen'
	impact evaluation	
		Arun Agrawal
11.45 - 13.00	<u>Lecture 6:</u> Major critiques of impact evaluation	'Von Langen'
		Arun Agrawal
13.00 - 14.30	Lunch:	
11.20 1.520		
14.30 – 16.30	Participant paper session 2: Two papers discussed	
	F'- 1 5	
	Find your group and room on page 5	

Day 3 – August 13, 2014

Time		Venue /
Time		Lecturers
08.30 – 09.00	Arrival and morning coffee	'Von Langen'
09.00 – 10.15	Lecture 7: The Politics of Highland Ecologies: An extended field report from Andean Peru.	'Von Langen' Mattias Borg Rasmussen
10.15 – 10.30	Coffee	
10.30 – 11.45	Lecture 8: Empires of Expertise: On the Movements of Knowledge and the Archive as a Site of Inquiry	'Von Langen' Martin Skrydstrup
11.45 – 13.00	<u>Lecture 9:</u> Imagined forests: The role of scientific forestry in an era of participation	'Von Langen' Jens Friis Lund
13.00 – 14.30	Lunch:	
14.30 – 16.30	Participant paper session 3: The groups discuss changes to their papers in response to the course learning Find your group and room on page 5	

Day 4 – August 14, 2014

Time		Venue / Lecturers
08.30 - 09.00	Arrival and morning coffee	'Von Langen'
09.00 - 10.15	Lecture 10: Mis-match and the politics of knowledge: some	'Von Langen'
	quandaries of using plural epistemologies	
		Andrea
		Nightingale
10.15 – 10.30	Coffee	
10.30 – 13.00	Lecture 11: Dilemmas of Expertise	'Von Langen'
		Christian Lund
		& Jens Friis
		Lund
13.00 - 14.00	Course evaluation, sandwiches and goodbyes	

<u>Lecture 1:</u> Situated Knowledges and Partial Perspectives: Ways of seeing and knowing 'nature'

Andrea Nightingale

In this lecture we take a look at debates over knowledge and apply them to environmental governance. Projects to improve people's material lives often (re)shape how people see themselves and the world around them. Such (re)shaping is not an innocent process, but rather a crucial mechanism through which environmental planners seek to accomplish their (own) objectives. Here we will focus on the notion of 'situated knowledges' and the inherent partiality of all epistemologies in order to take account of different ways of seeing and knowing the world.

Suggested readings:

Forsyth, Tim. (2010). Politicizing Environmental Explanations: What Can Political Ecology Learn from Sociology and Philosophy of Science? In M. J. Goldman, P. Nadasdy & M. D. Turner (Eds.), Knowing Nature: Conversations at the Intersection of Political Ecology and Science Studies. Chicago: University of Chicago Press.

Haraway, Donna. (1991). Simians, cyborgs, and women: the reinvention of nature. New York: Routledge. chapter 9 (situated knowledges—also available as a journal article 1988)

Hulme, Mike. (2010). Problems with making and governing global kinds of knowledge. Global Environmental Change, 20(4)

Lewontin, R. C. (1991). Facts and the Factitious in the Natural Sciences. Critical Inquiry, 18(Autumn), 140-153.

Lecture 2: Jesse Ribot

Vulnerability in the Sahel: Justice and the Causes of Risk

Why are people vulnerable? They are often vulnerable because they are poor, have no access to resources, markets, state services. They lack endowments and social protections. They don't have the resources to enable them to influence the authorities that govern them. They are unable to shape the political economy that shapes their entitlements. They participate, they do the dance of decentralization, they try to get a piece of the action, they sell new forest fruits, they make charcoal following absurd rules requiring useless labors that experts tell them are needed, they blame themselves for drought when told that their cutting drives the rains away, they then watch the forests turned black, stuffed into sacks, carted to roads, loaded into trucks, and taken away by wealthy urban merchants. They are paid a pittance as labor as the logical illogic of the legal illegal swirls around them in participatory programs. Then they go back home for some millet. In this section we will explore the case of poverty in charcoal producing villages in Senegal as a case of vulnerability production. We'll watch a short film, 'Weex Dunx and the Quota' (Scapegoat and the Quota) and hear a short lecture. Then we'll talk about why it is that vulnerability is measured by the length-to-weight ratio of babies or the amount of grain left in granaries – how come there are no vulnerability indicators based on degrees or kinds of exploitation, quality of representation, forms of market access. So, with the readings and class materials we'll ask what is causality? What is vulnerability? How do we measure it? What would real indictors look like? How do we chase vulnerability away?

Suggested readings:

Larson, Anne, and J. Ribot. 2007. 'The Poverty of Forestry Policy: Double Standards on and Uneven Playing Field'. *Journal of Sustainability Science*. Vol. 2, No.

2. http://pdf.wri.org/sustainability_science_poverty_of_forestry_policy.pdf.

Faye, Papa. Forthcoming. "From Recognition to Derecognition: Undercutting Representation Attempts through Technical Claims in Senegal's "Masquerade" Decentralization Project" Responsive Forest Governance Initiative Working Paper. Council for the Development of Social Science Research in Africa and University of Illinois. ~10,000 words.

Mitchell, T. 2002. "Can the Mosquito Speak?" Ch. 1, pp. 19-53 in *Rule of Experts: Egypt, Techno-politics, Modernity*. Berkeley: University of California Press.

Lecture 3:

Of what is this a case? Thinking through the concrete, the abstract, the specific and the general

Case studies are often presented as self-evident. However, of what the material is a case is actually less evident. It is argued in this article that the *analytical movements* of generalization, specification, abstraction and concretization can make us more conscious of what our work might be a case, and that the same data have the potential to make different cases depending on these analytical movements. An analytical matrix is developed and the four movements and various pitfalls are discussed.

Suggested readings:

Lund, C. Of what is this a case? Human Organization 73(3), Forthcoming in 2014.

Lecture 4: Getting to the Sociocene: Beyond an Instrumental Sociology of Risk

Jesse Ribot

Christian Lund

There are many social scientists, shall we say 'experts', working on climate change risk assessment, risk communication, and risk reduction. Some are helping natural scientists and actuaries hone their calculations of probability and consequence. Others are studying why most people are not as afraid as the climate scientists about the dangers ahead. Some climate social scientists are busy trying to communicate risk so that people will act appropriately in the face of grave threats. But many sociological thinkers of the past have thought about risk more broadly. They were concerned with how risk shaped society itself. Some may have been functionalists, but they were not as instrumental as most climate specialists are about risk-studies. Weber, Douglas, Beck, Foucault, Rose and others saw risk as a fundamental principal of social organization and change. In this lecture I will outline a few social theories of risk and some implications of the current era of climate change for how we see or do not see vulnerability and its causes when we go to understand what vulnerability is, why it is and what to do about it.

Suggested readings:

Ribot, J. Forthcoming. "Vulnerability and Emancipation in the Anthropocene: Causal Analysis of Climate Risk" Lead invited article in 40th anniversary special issue. *Journal of Peasant Studies*.

Taylor, P.J. and F.H. Buttel. 1992. How do we know we have global environmental problems? *GeoForum*, 23(3), 405-416.

Nally, David P. 2011. Human Encumbrances: Political Violence and the Great Irish Famine. Notre Dame: University of Notre Dame Press. "Introduction: Colonial Biopolitics and the Functions of Famine," pp. 1-19.

Lecture 5:

Arun Agrawal

Justifications & key evaluative strategies of impact evaluation

Do the trillions of dollars and euros spent by governments and donors on development/sustainability/conservation interventions produce any result? Can we know? Can we learn? Do we care? Do we care enough to move beyond critique?

In recent years, impact evaluation has come to mean rigorous, quantitative, experimental research design based assessments of the outcomes of projects, policies, and other interventions. This shift has meant that those interested in knowing how and to what extent a particular project has achieved its objectives have increasingly moved away from rom approaches that relied on impressionistic evidence, interview and focus group discussion-based writings, and expert opinion and knowledge-centric studies. Instead, current impact evaluations emphasize the need for precise estimates of the effects of interventions on the basis of randomized controlled trials in the field. When such experimental designs are infeasible, impact evaluation specialists argue for the need to undertake sophisticated statistical analyses of substantial amounts of data, and often rely on such techniques as matching-based statistical analyses, difference-in-difference estimations, and instrumental variables for improved causal inference from observational data. The readings assigned for this lecture provide a brief introduction to prominent approaches to impact evaluation (Bauchet and Morduch, Carden and Alkin) and the research conditions under which different approaches may be justifiable (Ferraro, Ferraro and Hanauer, Gullison and Hardner). The lecture will focus in particular on impact evaluation in the context of environmental and development interventions, but will also draw from other fields as needed to inform the theory and practice of impact evaluations related to sustainable development and governance.

Suggested readings:

- Deaton, A. (2010). Instruments, randomization, and learning about development. *Journal of economic literature*, 424-455.
- Ferraro, PJ. Counterfactual Thinking and Impact Evaluation in Environmental Policy, in Environmental program and policy evaluation: Addressing methodological challenges. New Directions for Evaluation, no. 122, M. Birnbaum and P. Mickwitz, Eds. Fairhaven, American Evaluation Association, 2009: 75-84.
- Ferraro PJ, Hanauer MM. (2014) How protected areas affect poverty through changes in ecosystem services and infrastructure development: quantifying causal mechanisms. *Proc Natl Acad Sci USA*.
- Gullison, R. and J. Hardner, "Using Limiting Factors Analysis to Overcome the Problem of Long Time Horizons," Environmental program and policy evaluation: Addressing methodological challenges. New Directions for Evaluation, no. 122, pp. 19-29, 2009.

Secondary literature:

- Bauchet, J., & Morduch, J. (2010). An Introduction to Impact Evaluations with Randomized Designs. *Financial Access Initiative Framing Note*.
- Carden, F., & Alkin, M. C. (2012). Evaluation roots: An international perspective. *Journal of MultiDisciplinary Evaluation*, 8(17), 102-118.

Lecture 6:

Arun Agrawal

Major critiques of impact evaluation

The answer to whether development/sustainability/conservation interventions have an effect is of as much concern to those affected by interventions as they are to academics. For precisely this reason, it is necessary to understand whether available impact evaluation strategies can adequately discern between the effects of the intervention and no-intervention. Even within the impact evaluation industry, there is active debate on when to apply which approach to impact evaluation so as to improve future policies and development/conservation outcomes. Taking the necessity of better impact evaluation as a starting point, this session will introduce students to the debates that occupy scholars of impact evaluation in terms of the effectiveness of different evaluation strategies.

Suggested readings:

- Barrett, C. B., & Carter, M. R. (2010). The power and pitfalls of experiments in development economics: some non-random reflections. *Applied economic perspectives and policy*, 32(4), 515-548.
- Cartwright, N. (2012). Presidential Address: Will This Policy Work for You? Predicting Effectiveness Better: How Philosophy Helps. *Philosophy of science*, 79(5), 973-989
- Elbers, C., & Gunning, J. W. (2013). Evaluation of development programs: randomized controlled trials or regressions? *The World Bank Economic Review*, lht025.

Lecture 7:

The Politics of Highland Ecologies: An extended field report from Andean Peru

Mattias Borg Rasmussen

In 1975, the Huascaran National Park in highland Peru was established around the Cordillera Blanca, the world's largest concentration of tropical glaciers. This highland area, however, is not only home to glaciers, condors and pumas, but also provides sources of life to the rural dwellers and townspeople living in the valley. Water tickles down, forming streams and rivers, but the herders traditionally enjoying usufruct of the highland pastures for their livestock increasingly see themselves under the jurisdiction of the national park regulations. Sites of both economic and spiritual activities, these highland ecologies have been the site of ongoing struggles between peasant communities and the national park administration. Evolving around notions of landscape, user-rights, local sovereignties and the very definition of the value of life, these highland glacier areas raise question about the role of particular ecologies in the contentious fields between local lives and wider structures of power, agendas and interests. This talk discusses themes of conservation and local governance, highlighting the methodological and analytical moves necessary to cast light upon the complex social struggles that evolve around contested territories. Immediately following an extended stay in the highland peasant community Catac, it takes the form of an extended field report, showing the dialectical movements between concepts and strategies from political ecology and the everyday and spectacular encounters between a peasant community and the national park administration.

Suggested readings:

Carey, Mark (2007) "The History of Ice: How Glaciers Became an Endangered Species," Environmental History 12, no. 3 (July 2007): 497-527.

Neuman, R.P. (1998)- Introduction in Imposing Wilderness: struggles over livelihood and preservation in Africa, pp. 1-14, UC Press

West, Paige (2006) Making Crater Mountain, in Conservation is Our Government Now: The Politics of Ecologies in Papua New Guinea, pp. 27-51, Duke U Press

Lecture 8:

Empires of Expertise: On the Movements of Knowledge and the Archive as a Site of Inquiry

Taking the Mau Forest Complex in Kenya as a case of deforestation, this lecture will tackle how various actors attribute cause and effect in forest management. Colonial knowledge regimes identified charcoal and fire-making as key drivers in deforestation, whereas postcolonial regimes routinely link "illegal" local logging practices, greed amongst forest managers and corruption as the prime causes of deforestation. The assigned reading has challenged such preconceptions in the case of Nigeria and this lecture will attempt to show how archival work and ethnography can do the same in the case of Kenya.

Suggested readings:

"Introduction" in *Things Fall Apart? The Political Ecology of Forest Governance in Southern Nigeria* by Pauline Hellermann (2013)

Martin Skrydstrup

Lecture 9:

Expertise in the Forest: The role of scientific forestry in an era of participation

Jens Friis Lund

Exemplified by studies of forestry, I will in this lecture seek to explore the nature of expert knowledge of the environment and scientific approaches to its management and their depoliticizing tendencies. Specifically, I will show how scientists and professional foresters, the forestry experts, have always struggled to assert their expertise effectively over forests (and people), and how expert knowledge of the environment is characterized by being unstable, resisted, and performed upon. Yet, I will also illustrate how expertise may represent a resource that is drawn upon by social actors to delimit the space of politics and how this affects the possibilities for participation in and deliberation about environmental management.

Suggested readings:

Mathews, A. S. (2011). Instituting nature: authority, expertise, and power in Mexican forests. The MIT Press. Chapters 1, 2 and 9. 68 pages.

Secondary literature:

Green, K. and J.F. Lund. The Politics of Expertise in Participatory Interventions. Mimeo. 20 pages.

Lecture 10:

Mis-match and the politics of knowledge: some quandaries of using pleural epistemologies

In this lecture we return to core debates over knowledge and think about what they mean in terms of interdisciplinary knowledge production. While many researchers seek to use multiple theories and methods in their work, they rarely engage in a robust manner the ontological epistemological challenges of doing so. The quest to include 'indigenous knowledge', for example, rarely considers whether the phenomenons represented by different knowledge systems are indeed the same. In this session we contrast several different ways of integrating data from different methods to think through the possibilities and challenges of doing so.

Suggested readings:

Ahlborg, H., & Nightingale, Andrea J. . (2012). Mismatch between scales of knowledge in Nepalese forestry: epistemology, power and policy implications. Ecology and Society, 17(4), 16.

Fielding, Nigel G. (2012). Triangulation and Mixed Methods Designs: Data Integration With New Research Technologies. Journal of Mixed Methods Research, 6(2), 124-136. doi: 10.1177/1558689812437101

Shaw, Ian Graham Ronald, Robbins, Paul F., & Jones, John Paul. (2010). A Bug's Life and the Spatial Ontologies of Mosquito Management. Annals of the Association of American Geographers, 100(2), 373-392. doi: 10.1080/00045601003595446

Andrea Nightingale

Lecture 11:

Dilemmas of Expertise

Christian Lund & Jens Friis Lund

This lecture will be an interactive session where we pick-up our debates, burning questions, and any loose ends during the week and show how the different frameworks and analytic pathways towards "expertise", which you have encountered during the week, implicate different arguments about what counts as "expertise" and what "expertise" might be up to in development discourse and practice. It will involve the outlining of dilemmas of expertise and the practicing of expertise that we will be discussing in groups and in plenum to come up with ways of thinking and dealing with them.

Suggested readings:

Mitchell, Timothy (2002) "Principles True in Every Country", in *Rule of Experts: Egypt, Techno-Politics, Modernity*. Berkeley: Uni of California Press.

Mosse, David (2007) "Notes on the ethnography of expertise and professionals in international development." Presented at the conference *Ethnografeast III: Ethnography and the Public Sphere*. Lisbon, June 20-23, 2007.

Lund, Christian (2010)"Approaching Development: An Opionated Review. *Progress in Development Studies* vol. 10, (1) 19-34.