

EVALUATION OF THE THOR HEYERDAHL SUMMER SCHOOL IN ENVIRONMENTAL GOVERNANCE

THE 2011 COURSE: INSTITUTIONS FOR SUSTAINABLE DEVELOPMENT

The Thor Heyerdahl Summer School (THSS) series was started in June 2011 by offering the course 'Institutions for Sustainable development'. 27 PhDs/young researchers from 18 countries participated – see appendix 1. This note includes an evaluation of the course including information about the selection process, the program, the running of the school, students' evaluation and the finances.

A homepage for the school is found at <http://www.umb.no/thor-heyerdahl-summer-school>. A course homepage was also developed accessible only for teachers and participants including detailed program, references to literature, lecture presentations, presentations of participants etc.

The summer school series is run by a course committee at Noragric (Arild Vatn (leader), Tor A. Benjaminsen and Pål Vedeld). There is a reference group with participants from CICERO, Fridtjof Nansen Institute, Norwegian Institute of International Affairs and the Thor Heyerdahl Institute. There is a course secretariat at Noragric. Josie Teurlings managed all the communication with participants through the selection process and after. She also supported in the selection of candidates. Hans Adam (PhD) was the main responsible for the organizing of practicalities involved when running the school. Nicole Rezende, Evy Jørgensen and Lars Kåre Grimsby also participated in that phase.

1. Selection process

The THSS was announced January 4 through the establishment of a homepage at UMB plus distribution of the link to this page via e-mail to various relevant networks. Information was also posted on various other homepages – relevant research organizations – and various newsletters. By the deadline of February 15 about 160 people had applied from all over the world. The quality of applicants was very high and it was a very demanding job to select the few to come. The final selection included 22 candidates from among these 160 and 5 from 4 universities in the South with which Noragric has institutional collaboration agreements. A list of 15 reserves was also set up. Three people from this list were finally selected as some had to withdraw (among these two Norwegians).

2. The program

The course consisted of lectures, seminars and various forms of group work. There was also a social program. Altogether 14 lecturers participated. Five were international – among these the Nobel laureate Elinor Ostrom. Three were from Norwegian research institutes outside of UMB. One represented the Norwegian Ministry of Environment. Finally, five were from UMB.

A lot of effort was put into developing a coherent program ensuring both good progression of themes and emphasis on topics of scientific disagreement. The program is attached in two formats. Appendix 2 gives an overview of topics, lecturers, social program etc. Appendix 3 gives the full overview of the scientific program with also short summaries for each lecture/group work session and the literature.

3. The running of the school

The school ran smoothly. All elements were carried out as planned. Arild Vatn was responsible for the scientific content and participated in all scientific activities to ensure continuity and coherence. As already mentioned, several people from Noragric staff helped out concerning practical issues like housing, food and snacks, travels, social program etc. The students were very engaged and that certainly made the running of the course easier.

Seen from the organizers side the school was a great success. I have been involved in several schools of this kind before, but never experienced this kind of engaged participants and positive feed-backs during the course. The most celebrated were certainly the lectures by Ostrom. At the same time also the other lecturers delivered very well.

Several of the teachers involved from Noragric plus a post doc (Synne Movik) assisted in supervising students in the second half of the course. They were then working in groups to develop the aim and structure of a paper to be written after the school. This paper has to be graded 'pass' for participants to earn a course diploma.

It should finally be mentioned that lectures were open and several people except the accepted PhDs participated. A few actually followed almost all lectures. A professor from the University of St Petersburg also attended (on own costs) the first week.

4. Students' evaluation

At the end of the school, an evaluation was undertaken – partly in the form of a questionnaire that each participant filled out and partly in the form of a common discussion. The results were very encouraging. Concerning the overall evaluation of the course, it scored 4.84 on a scale from 1-5 (where 5 is best). We find this almost extraordinary given the high level of the participants.

Participants were slightly happier with the lectures than with the group work. Both scored high, though. The participants were very happy with the mix of elements, too (3.76 on a scale from 1-

4). We also note that the course must have been helpful for their future research on sustainability (3.96 on a scale from 1-4). Finally, participants rated the quality of communication with the course secretariat during the preparation of the school as very good.

The course was found to maybe be a bit demanding (3.56 on a scale where where 3 is suitable and 5 is 'too demanding'). We are happy with this result as we want participants to 'stretch themselves' a bit. I should still mention that a few had a background that was not the best. This concerned some of the participants selected by the Universities of the South with which Noragric has an institutional agreement. We realize that the people involved in the selection at these universities tended to use the criteria for selection differently from what we intended. Hence, their background especially in social sciences/governance theory was weaker than expected.

The course presented several perspectives on governance, institutions and sustainable development. Time was set aside for a group work to compare these. We realized that more time should have been allocated to that exercise. This also came up in the oral evaluation.

The students also appreciated very much the social program with the visit to the Kon-Tiki museum as the main high light. Meeting Thor Heyerdahl jr. personally gave them a connection to the adventures that they will never forget.

5. Finances

The overall budget for the course was 862.000 NOK. Details are found in Appendix 4. The accounts are not yet ready, but as far as we now can see, costs are close to what was budgeted.

Appendix 1

Participants of the Thor Heyerdahl Summer School 2011

Family names	Given names	Research Institute / University	Nationality
Asara	Viviana	Universitat Autònoma de Barcelona (Spain)	Italy
Asfaw	Demoz	University of Waterloo (Canada)	Ethiopia
Bathe	Frauke	Helmholtz Centre for Environmental Research (Germany)	Germany
Berger	Lars	Humboldt-Universität zu Berlin (Germany)	Germany
Berghofer	Augustin	UFZ - Helmholtz Centre for Environmental Research (Germany)	Germany
Bixler	Richard Patrick	Colorado State University (USA)	USA
Cent	Joanna Ewa	Jagiellonian University (Poland)	Poland
Chambile	Enock	Sokoine University of Agriculture (Tanzania)	Tanzania
Dell' Angelo	Jampel	Universitat Autònoma de Barcelona (Spain)	Italy
Dobernick	Karin	Vienna University of Economics and Business (Austria)	Austria
Epstein	Graham Bryant	Indiana University (USA)	Canada
Erlewein	Alexander	University of Heidelberg (Germany)	Germany
Ertor Akyazi	Pinar	Bogazici University (Turkey)	Turkey
Gebreab	Hadsh Tesfa	Mekelle University (Ethiopia)	Ethiopia
Khan	Abu Turab	Comsats Institute of Information Technology (Pakistan)	Pakistan
Lawton	Ricky Neil	University of York (UK)	England
Lajako Benjamin	Julius	University of Juba (Sudan)	Sudan
Mfune	Orleans	University of Glasgow (UK)	Zambia
Mumbunan	Sonny	UFZ - Helmholtz Centre for Environmental Research (Germany)	Indonesia
Munoz Escobar	Marcela	Leipzig University (Germany)	Colombia
Ramcilovic-Suominen	Sabaheta	University of Eastern Finland and European Forest Institute (Finland)	Macedonia
Roba	Hassan Guyo	National Museums of Kenya (Kenya)	Kenya
Schmidt	Oscar Maximilian	Humboldt Universität zu Berlin	Germany
Sprain	Leah	Colorado State University (USA)	USA
Tompsett	Clare	University of Bergen (Norway)	England
Tumbo	Madaka	University of Dar es Salaam (Tanzania)	Tanzania
Udovyk	Oksana	Södertörn University	Ukraine

Appendix 2

Programme

Thor Heyerdahl Summer School in Environmental Governance

June 20 - July 1, 2011

Course 1: Institutions for Sustainable Development

Monday June 20 Introduction

08:00 - 09:00 Breakfast (Library of the Biotechnology building)

09:00 - 12:00 Welcome and round of presentation of participants

12:00 – 13:00 Lunch

14:00 - 16:30 Lecture 1: The theory of institutions cont. (A. Vatn)

16:30 - 18:00 Student activities

18:00 – 19:00 Dinner

Tuesday June 21 Institutions for sustainable development

08:00 – 09:00 Breakfast

09:00 - 10:30 Lecture 2: Core concepts (A. Vatn)

11:00 - 12:30 Seminar 1: Institutions for sustainable development (A. Vatn)

12:30 – 13:30 Lunch

14:00 - 16:00 Group work session 1: Presentation of students' own research.

Introduction to term paper topics

16:30 - 18:00 Student activities

18:00 – 19:00 Dinner

Wednesday June 22 Environmental governance- Theory and applications

08:00 – 09:00 Breakfast

09:00 - 10:30 Lecture 3: Environmental governance (A. Chhatre)

11:00 - 12:30 Seminar 2: Forest Governance (A. Chhatre)

12:30 – 13:30 Lunch

14:00 - 16:00 Lecture 4: International governance – a general perspective. (O. J. Sending)
16:30 - 18:00 Term paper session
18:00 – 19:00 Dinner

Thursday June 23 Ecology and society

08:00 – 09:00 Breakfast

09:00 - 10:30 Lecture 5: Sustainability and the issue of fit (K. Farrell)

11:00 - 12:30 Lecture 6: Ecological and social resilience (I. Bryceson and B. Beymer-Farris)

12:30 – 13:30 Lunch

14:00 - 16:00 Group work session 2: Ecology and society (Farrell, Bryceson and Beymer-Farris)

16:30 - 18:00 Term paper session

18:00 – 19:00 Dinner

Friday June 24 Environmental governance at national level

08:00 – 09:00 Breakfast

09:00 - 10:30 Lecture 7: National policies to protect the environment (P. Vedeld)

11:00 - 12:30 Group work session 3: National policies and policy measures (P. Vedeld, A. Vatn)

12:30 – 13:30 Lunch

14:00 - 16:00 Term paper session

18:00 – 19:00 Dinner

Saturday 25 Environmental governance-Cooperation and complexity

08:00 – 09:00 Breakfast

09:00 - 10:30 Lecture 8: Cooperating for the common good (E. Ostrom)

11:00 - 12:30 Lecture 9: Coping with complexity (E. Ostrom)

12:30 – 13:30 Lunch

18:00 – Barbeque for those who are interested (to be confirmed)

Sunday 26 Visit to the open air museum and KonTiki museum

08:00 – 09:00 Breakfast

0930: Leave Ås by bus

1030: Guided tour of Folkemuseet

1230: Lunch

1400-1600: Guided tour of the Kon-Tiki museum by Thor H. Jr and Maja Bauge (Director of Museum)

1900: Dinner at Ås for those interested (to be confirmed)

Monday June 27 Environmental governance in practice-Climate change

08:00 – 09:00 Breakfast

09:00 - 10:30 Lecture 10: Science (in)forming policy (C. Spash)

11:00 - 12:30 Lecture 11: A polycentric approach to climate change (E. Ostrom)

12:30 – 13:30 Lunch

14:00 - 16:00 Lecture 12: Case 1: Climate: the evolving climate regime (S. Andresen)

16:30 - 18:00 Term paper session

18:00 – 19:00 Dinner

Tuesday June 28 Political ecology

08:00 – 09:00 Breakfast

09:00 - 10:30 Lecture 13: Studying environmental governance: a perspective from political ecology (T. A. Benjaminsen)

11:00 - 12:30 Group work session 4: Different perspectives on environmental governance (T.A. Benjaminsen and A. Vatn)

12:30 – 13:30 Lunch

14:00 - 16:00 Term paper session

16:30 - 18:00 Term paper session continued

18:00 – 19:00 Dinner

Wednesday June 29 Environmental governance in practice-Climate change and biodiversity

08:00 – 09:00 Breakfast

09:00 - 10:30 Case 1 (cont.): Climate change – the rise of markets (C. Spash)

11:00 - 12:30 Case 2: Biodiversity: CBD-how to achieve international consensus (T. Solhaug)

12:30 – 13:30 Lunch

14:00 - 16:00 Case 2: Biodiversity (cont.): Biological diversity and genetic resources in international negotiations (K. Rosendal)

16:30 - 18:00 Term paper session

18:00 – 19:00 Dinner

Thursday June 30 Environmental governance in practice - from the global to the local

08:00 – 09:00 Breakfast

09:00 - 10:30 Case 3: REDD: From the global to the local – the case of REDD (A. Angelsen)

11:00 - 12:30 Case 3: National REDD architectures (A. Vatn)

12:30 – 13:30 Lunch

14:00 - 16:00 Term paper session

16:30 - 18:00 Term paper session

18:00 – 19:00 Dinner

Friday July 1 Summing up

08:00 – 09:00 Breakfast

09:00 - 10:30 Presentation of group paper outlines

11:00 - 12:00 Presentation of group paper outlines

12:00 - 12:30 Summing up including school evaluation

12:30 – 13:30 Lunch

Appendix 3

Thor Heyerdahl Summer School in Environmental Governance
School 1, June 20 – July 1, 2011:
Environmental Governance: Institutions and Sustainable Development

SESSION DESCRIPTIONS

This note includes a short description of the lectures/seminars/group works at the course. It also includes a literature list divided in 'Core readings', 'Supplementary readings' and in some occasions also 'Preparatory readings'. It is expected that students have gone through the 'Core readings' before the course starts. 'Preparatory readings' are offered for those who are unfamiliar with a field. Internet links to many of the readings are offered. If not, PDFs are made and found on the course web under 'Literature'. Some books are included in the 'Preparatory readings'. For these you will need to utilize your library.

DAY 1 (June 20): INTRODUCTION

Welcome and round of presentation of participants (Monday June 20, 09.00 - 12.00):

In this session the program for and the format of the course will be presented. Participants will present themselves. Participants' expectations concerning the course will be discussed.

Lecture 1 (Monday June 20, 14.00 – 16.30): The theory of institutions (Arild Vatn)

The aim of this lecture is to give an overview of main aspects of the theory of institutions. Various definitions of the concept will be presented, and compared. Similarly, different positions within institutional theory will be briefly described. This concerns 'new' and 'classical' institutional economics and parallel positions within sociology/anthropology/political science.

The lecture will go more in depth into classical institutional economics covering the following:

- Institutions as conventions, norms and formal rules
- The agent-structure interaction - how institutions form actors and actors form institutions
- Institutions and access to resources/property rights
- Institutions and motivation (what we want to do)
- Institutions and coordination/transaction costs (what we are able to do)
- Institutions and power (who are able to do what)

I will close with a brief outlook on the issue of institutions and the issue of governance.

Core readings:

- Bowles, S. 2008. Policies Designed for Self-Interested Citizens May Undermine “The Moral Sentiments”: Evidence from Economic Experiments. *Science*, 320:1605-1609
<http://www.sciencemag.org/content/320/5883/1605.full>
- March, J.G. and J.P. Olsen, 2009. Elaborating the New Institutionalism. In Rhodes, R.A.W., S.A. Binder and B.A. Rockman (eds.): *The Oxford Handbook of Political Institutions*. Oxford: Oxford University Press, pp 3-22.
- Vatn, A., 2005. Institutions and the environment. Chapter 2: Institutions: the individual and the society. Cheltenham: Edward Elgar, pp. 25-59.
- Vatn, A., 2005. Rationality, Institutions and Environmental Policy. *Ecological Economics*, 55(2):203-217
<http://www.china-sds.org/kcxfzbg/addinfomanage/lwwk/data/kcx481.pdf>

Supplementary readings:

- Hay, C., 2009. Constructivist Institutionalism. In Rhodes, R.A.W., S.A. Binder and B.A. Rockman (eds.): *The Oxford Handbook of Political Institutions*. Oxford: Oxford University Press, pp 56-74.
- Hodgson, G., 1998. The Approach of Institutional Economics. *Journal of Economic Literature*, XXXVI (March): 166-192.
http://www.proglocode.unam.mx/system/files/Hogdson_The%20Approach%20of%20Institutional%20Economics.pdf
- Meyer, J.W., 2010. World Society, Institutional Theories, and the Actor. *Annual Review of Sociology*, 36:1-10
<http://www.annualreviews.org/doi/pdf/10.1146/annurev.soc.012809.102506>
- Paavola, J. and N. Adger, 2005. Institutional ecological economics. *Ecological Economics*, 53(3):353-368.
<http://www.china-sds.org/kcxfzbg/addinfomanage/lwwk/data/kcx375.pdf>
- Vatn, A., 2005. Institutions and the environment. Chapter 3: Institutions: Coordination and conflict. Chapter 7: Explaining institutional change. Cheltenham: Edward Elgar, pp. 60-85 and pp. 169-191.
- Vatn, A., 2009. Cooperative behavior and institutions. *Journal of Socio-Economics*, 38:188-196.
<http://www.eese2009.si/papers/Vatn%20-%20Cooperative%20behavior.pdf>

Preparatory readings for participants that are unfamiliar with the topic:

The course is based on participants having a good insight in the ‘basics’ of environmental governance. The course makes links across social and natural sciences. It has nevertheless a stronger focus on the social science dimensions. As governance is very much about the institutional structures humans develop for ‘guiding’ action – the theory of institutions is core. Those having little or no background in institutional theory might want to look at books like:

Scott, W.R., 2008. *Institutions and Organizations*. Los Angeles: Sage. 3rd edition

Vatn, A., 2005. *Institutions and the Environment*. Cheltenham: Edward Elgar.

Note that some chapters from the latter book are included as core or supplementary readings above.

Socializing after ended lecture

DAY 2 (June 21): INSTITUTIONS FOR SUSTAINABLE DEVELOPMENT

Lecture 2 (Tuesday June 21, 09.00 - 10.30): Core concepts (Arild Vatn)

This lecture is aimed at undertaking a clarification of core concepts related to an institutional analysis of governance and sustainable development. I will hence define and discuss the following concepts

- Sustainable development
- Resource regime
- Governance structure
- Environment governance system

A conceptual structure will be developed where the links between the various concepts are emphasized. The institutional dimensions related to each concept will be underlined while drawing on the perspectives presented in lectures 1 and 2. The role of the state, the civil society and the private sector will be emphasized. The concepts of 'fit', 'interplay' and 'scale' will also be introduced

Core readings

Ostrom, E., 2007. A diagnostic approach for going beyond panaceas. *Proceedings of the National Academy of Sciences of the United States of America*, Going Beyond Panaceas, Special Feature, 104(39):15181-15187.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2000497/>

Vatn, A., (in review). Environmental governance – a conceptualization. Unpublished book chapter. 16 p.

Young, O., 2002. Environmental Change: Institutional Drivers, Institutional Responses. In Young, O.R.: *The Institutional Dimension of Environmental Change. Fit, Interplay, and Scale*, Cambridge MA: The MIT Press, pp. 3-28.

Supplementary readings

Paavola, J., 2007. Institutions and environmental governance: A reconceptualization. *Ecological Economics*, 63, (1): 93-103

<http://www.china-sds.org/kcxfzbg/addinfomanage/lwwk/data/kcx801.pdf>

Vatn, A., 2005. Institutions and the environment. Chapter 10: Resource regimes. Cheltenham: Edward Elgar, pp. 252-299.

Seminar 1 (Tuesday June 21, 11.00 - 12.30): Institutions for sustainable development (Arild Vatn)

This seminar will consist of

- a presentation of some perspectives concerning what directions societies could take to develop institutions that would better facilitate sustainable development, and
- a structured discussion among participants focused on alternative strategies

In the presentation, a diagnosis of present institutions for economic activity will be offered. Similarly a characterization of the form and capacities of present policies for environmental protection will be made. Finally, some type solutions for will be sketched.

The motivation for this seminar is to raise some of the fundamental questions related to what sustainable development may demand. It will set the stage for the rest of the summer school.

Core readings

- Hagedorn, K. (2008). Integrative and Segregative Institutions: a Dichotomy for Nature-related Institutional Analysis. In Schäfer, C., C. Rupschus, U.J. Nagel (eds.). *Enhancing the Capacities of Agricultural Systems and Producers*. Proceedings of the Second Green Week Scientific Conference. Marggraf, Weikersheim, pp. 26-38.
- Vatn, A., 2009. Sustainability, institutions and behavior. In Beckmann, V. and M. Padmanabhan (eds.): *Institutions and Sustainability*. Berlin, Springer, pp. 293-314.

Supplementary readings

- Bromley, D.W., 1998. Searching for sustainability: The poverty of spontaneous order. *Ecological Economics*, 24:231–240
<http://www.china-sds.org/kcxfzbg/addinfo/management/lwwk/data/kcx923.pdf>
- Jordan, A., 2008. The governance of sustainable development: taking stock and looking forwards. *Environment and Planning C: Government and Policy*, 26:17- 33.
<http://www.envplan.com/abstract.cgi?id=cav6> (Abstract only)
- Vatn, A., 2008. Sustainability: the Need for Institutional Change. In Utting P and J. Clapp (eds.): *Corporate Accountability and Sustainable Development*. New Delhi, Oxford University Press, pp. 61-91.

Group work session 1 (Tuesday June 21, 14.00 - 16.00): Presentation of students' own research. Introduction to the term paper process

In this session each student will get the possibility to present their research interests for other participants. As these presentations will have to be brief, please bring also a one page (max) summary of your research to be copied to all participants. This summary must include name and contact details. A picture would also be great.

Socializing after the group work session

DAY 3 (June 22): ENVIRONMENTAL GOVERNANCE – THEORY AND APPLICATIONS

Lecture 3 (Wednesday June 22, 09.00 - 10.30): Environmental governance (Ashwini Chhatre)

This lecture outlines major trends in environmental governance over the last three decades, focusing on the emergence of hybrid forms of governance that draw upon the complementarities of different actors. This shift in the locus of governance over the last three decades has also been accompanied by a relative withdrawal of the state as a prime interlocutor, with more attention paid to the roles of market-based mechanisms, NGOs, and local communities. While these shifts are a welcome correction to the institutional dysfunction and distortion of the past, the lecture will examine the potential and limitations of hybrid forms in addressing the challenges of environmental governance in the 21st century. Particular

emphasis will be paid to the nature of interactions between different across located hierarchically across geographical scale from the local to the global, as well as along a continuum of power asymmetries.

Core readings

Lemos, M.C. and A. Agrawal, 2006. Environmental Governance. *Annual Review of Environment and Resources* 31: 297–325.

<http://www-personal.umich.edu/~arunagra/papers/publications/2006.%20Maria%20Carmen%20Lemos%20and%20Arun%20Agrawal.%20%20Environmental%20Governance.pdf>

Liverman, D., 2004. Who Governs, at What Scale and at What Price? Geography, Environmental Governance, and the Commodification of Nature. *Annals of the Association of American Geographers* 94 (4): 734-738

<http://www.aimes.ucar.edu/docs/ssc/2005/04.liverman.pdf>

Cashore, B., 2002. Legitimacy and the Privatization of Environmental Governance: How Non–State Market–Driven (NSMD) Governance Systems Gain Rule–Making Authority. *Governance* 15(4): 503-529.

http://www.yale.edu/forestcertification/pdfs/2002/02_new_gove_nmsd.pdf

Seminar 2 (Wednesday June 22, 11.00 - 12.30): Forest governance (Ashwini Chhatre)

This seminar will examine geographical and institutional variation in forest governance across the world, but focusing on developing countries in particular. Two major objectives of forest governance will be highlighted – Production and Protection – in the context of five main trends in forest governance (logging concessions, forest product certification, payment for ecosystem services, strict protected areas, and community-based forest management). Both production and protection objectives of forest governance are present to some degree in the management of almost all forests, and present unique challenges. The seminar will focus on the challenges of forest governance in reconciling conflicting demands of production and protection, as well as the strength and weaknesses of the four major trends in addressing the challenges of forest governance in different contexts

Core readings

Agrawal A., A. Chhatre and R. Hardin, 2008. Changing Governance of World’s Forests. *Science* 320: 1460-1462.

<http://www.earth.illinois.edu/news/documents/agrawalchhatrehardinscience2008.pdf>

Zimmerer, K.S., R.E. Galt and M.V. Buck, 2004. Globalization and Multi-Spatial Trends in the Coverage of Protected-Area Conservation (1980-2000). *Ambio* 33(8): 520-529.

<http://www.bioone.org/doi/full/10.1579/0044-7447-33.8.520>

Larson, A.M. and F. Soto, 2008. Decentralization of Natural Resource Governance Regimes. *Annual Review of Environment and Resources* 33: 213-239.

<http://www.annualreviews.org/doi/pdf/10.1146/annurev.environ.33.020607.095522>

Lecture 4 (Wednesday June 22, 14.00 - 16.00): International governance – a general perspective (Ole Jacob Sending)

The lecture will go through three different approaches to the study of international politics and global governance (realism, liberalism, constructivism). Whereas realism sees international politics as driven by rivalry, liberalism sees opportunity for cooperation by self-interested actors,

and constructivism sees the potential for learning and integration over time. The lecture will go through these theories' view of i) the nature of actors' interests, ii) what explains policy outcomes, and iii) the power of non-state actors. It will also cover more recent interests in how the authority to govern may be established and institutionalized without state consent. Empirical illustrations will be drawn from the history of population policy, development policy, and peace operations. These empirical examples will be used to discuss the different theoretical approaches' strength and weaknesses, and also to pinpoint central institutional dimensions of existing governance arrangements.

Core readings

Avant, D., M. Finnemore and S.K. Sell (eds) (2010) *Who Governs the Globe*. Cambridge University Press. Chapter 1

Barnett, M. and M. Finnemore (2004) *Rules for the World*. Cornell University Press. Chapter 1 and 2.

Drezner, D. (2008) *All Politics is Global*. Princeton University Press. Chapter 1.

Supplementary readings

Mearsheimer, John (1994) "The False Premise of International Institutions". *International Security*, 19(3):5-49.

<http://mearsheimer.uchicago.edu/pdfs/A0021.pdf>

Keohane, Robert O. and Lisa Martin (1995) "The Promise of Institutional Theory" *International Security*, 20(1):39-51.

Term paper session (Wednesday June 22, 16.30 – 18.00)

Group formation, term paper ideas development

DAY 4 (June 23): ECOLOGY AND SOCIETY

Lecture 5 (Thursday June 23, 09.00 – 10.30): Sustainability and the issue of fit (Katharine Farrell)

This presentation will emphasize the following issues:

- 1) Understanding economics as human biology: opening up the ecology and society discourse
 - a) understanding social organization as an attribute of the human species
 - b) understanding economic activity as the sorting of materials and the conscious construction and occupation of constructed niches
 - c) the problem of socio-biology and how to avoid this trap
- 2) basic principles of fit in evolutionary theory and biology
 - a) basic principles of biological evolution and the concept of fit
 - b) recent elaborations: open systems, niche construction and co-evolution
 - c) applicability of the concept of biological fit to the study of human social institutions: potential and limitations

- 3) Young and Underdal's concept of institutional fit - a brief overview of the core principles and some applied usages
 - a) applicability of this discourse to the study of the human biology of social institutions
 - i) potential and constraints in theory
 - ii) potential and constraints in practice
 - iii) discussion of links to the shrimp farming case

Core readings

- Boulding, K.E. 1994 [1966]. "The Economics of the Coming Spaceship Earth." In *Valuing the Earth, Economics, Ecology, Ethics*. eds. Herman Daly and Kenneth Townsend. Cambridge, MA: The MIT Press: 297-310. <http://www.panarchy.org/boulding/spaceship.1966.html>
- Folke, C., L. Pritchard, F. Berkes, J. Colding, and U. Svedin. 2007. The problem of fit between ecosystems and institutions: ten years later. *Ecology and Society* 12(1): 30. [online] URL: <http://www.ecologyandsociety.org/vol12/iss1/art30/>
- Laland, K.N. 2000. "Niche construction, biological evolution, and cultural change." *Behavioral and Brain Science* 23:131-175. <ftp://ftp.princeton.edu/pub/harnad/BBS/.WWW/bbs.laland.html>

Supplementary readings

- Caspi, A., J. McClay, T.E. Moffitt, J. Mill, J. Martin, I.W. Craig, A. Taylor and R.S Poulton. 2002. "Role of Genotype in the Cycle of Violence in Maltreated Children." *Science* 297: 851-854. <http://www.sciencemag.org/content/297/5582/851.full>
- Farrell, K.N. 2007. "Living with Living Systems: the co-evolution of values and valuation." *The International Journal of Sustainable Development and World Ecology* 14(1):14-26.
- Holling, C.S. 2001. "Understanding the complexity of economic, ecological and social systems." *Ecosystems* 4:390-405.

Preparatory readings for participants that are unfamiliar with the topic:

- Bertalanffy, L. v. 1950. "An Outline of General System Theory," *The British Journal for the Philosophy of Science*, 1(2): 134-165. http://www.isnature.org/events/2009/Summer/r/Bertalanffy1950-GST_Outline_SELECT.pdf
- Young, O.R. 2008. "The Architecture of Global Environmental Governance: Bringing Science to Bear on Policy" *Global Environmental Politics* 8(1):14-32. http://mtw160-150.ippl.jhu.edu/login?uri=/journals/global_environmental_politics/v008/8.1young.pdf
(abstract only)

Lecture 6 (Thursday June 23, 11.00 – 12.30): Ecological and social resilience (Ian Bryceson and Betsy Anne Beymer-Farris)

This lecture will cover the following points:

- Background and history of the concept of ecological resilience
- Contrasts between conventional ecology and ecological resilience thinking
- The adaptive cycle ("lazy eight"), panarchy, adaptation and transformation
- Attempts to link ecological and social resilience
- The relevance and application of resilience to resource management
- The relevance and application of resilience to environmental governance
- Using resilience as an analytical approach in research
- Critiques on shortcomings of resilience ideas in relation to social theory
- A recent attempt to integrate resilience ideas with political ecology
- Trends in ideas, key literature sources and websites on resilience thinking

Core readings

- Holling, C.S., (1973). Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics* 4: 1–23. <http://www.iiasa.ac.at/Admin/PUB/Documents/RP-73-003.pdf>
- Folke C. et al. (2010). Resilience thinking: integrating resilience, adaptability and transformability. *Ecology and Society* 15(4):1-20. <http://www.ecologyandsociety.org/vol15/iss4/art20/>

Supplementary readings

- Folke, C. (2006). Resilience: the emergence of a perspective for social-ecological systems analyses. *Global Environmental Change* 16:253–267. http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VFV-4KfV39T-1&_user=597823&_coverDate=08%2F31%2F2006&_rdoc=1&_fmt=high&_orig=gateway&_origin=gateway&_sort=d&_docanchor=&_view=c&_searchStrId=1706063523&_rerunOrigin=google&_acct=C000030758&_version=1&_urlVersion=0&_userid=597823&md5=6a6ea9ea935875bf13065f538dafa3a8&searchtype=a
- Anderies, M. et al. (2004). A framework to analyze the robustness of social-ecological systems from an institutional perspective. *Ecology and Society* 9(1):1-18.
- Lebel, L. et al. (2006). Governance and the capacity to manage resilience in regional social-ecological systems. *Ecology and Society* 11(1):1-19. http://dgroups.org/file2.axd/8bdcf36b-065b-420f-9850-239e293c19c6/governance_resilience.pdf
- Chapin, F.S. et al. (2011). Ecosystem stewardship: sustainability strategies for a rapidly changing planet. *Trends in Ecology and Evolution* 25:1-4.

Preparatory readings for participants that are unfamiliar with the topic:

- Folke, C. et al. (2002). Resilience and Sustainable Development. Brochure presented to World Summit on Sustainable Development, Johannesburg.
- Folke, C. et al. (2002). Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations. Environmental Advisory Council, Sweden. <http://www.sou.gov.se/mvb/pdf/resiliens.pdf>
- Berkes, F. and Folke, C. (1998) Linking social and ecological systems for resilience and sustainability. In Berkes, F. and Folke, C. (eds.) *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience*, chapter one, pp. 1-26. Cambridge University Press, Cambridge, UK

Group work session 2 (Thursday June 23, 14.00 - 16.00): Ecology and society. Led by Katharine Farrell, Ian Bryceson and Betsy Anne Beymer-Farris

Shrimp farming will be used as case

Preparatory readings for the group work:

- Lebel, L., et al. (2002). Industrial Transformation and Shrimp Aquaculture in Thailand and Vietnam: Pathways to Ecological, Social, and Economic Sustainability? *Ambio*, 31 (4): 311-323. http://www.biotec.or.th/shrinfo/documents/lebel_ambio0206.pdf
- Lebel, L. et al., (2010). Innovation cycles, niches and sustainability in the shrimp aquaculture industry in Thailand. *Environmental Science and Policy*, 13: 291-302. http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VP6-4YX0BYS-1&_user=597823&_coverDate=06%2F30%2F2010&_rdoc=1&_fmt=high&_orig=gateway&_origin=gateway&_sort=d&_docanchor=&_view=c&_acct=C000030758&_version=1&_urlVersion=0&_userid=597823&md5=abed79ffac498e22bbc41b3a2b1d63f7&searchtype=a

Term paper session (Thursday June 23, 16.30 – 18.00)

Group formation, term paper ideas development

DAY 5 (June 24): ENVIRONMENTAL GOVERNANCE AT THE NATIONAL LEVEL

Lecture 7 (Friday June 24, 09.00 – 10.30): National policies to protect the environment (Paul Vedeld)

This lecture will focus on policy-making at the national level. It will cover the following main issues

- The evolution of the field of environmental policy
- Environmental policy and environmental governance
- Different ontological perspectives on environmental policy
- The process of formulating policies
- Different types of policy instruments and their power basis
- New trends in environmental policy

Core readings

Bemelmans-Videc, M-L. and E. Vedung, 1998. Conclusions: Policy Instruments Types, Packages, Choices and Evaluation. In Bemelmans-Videc, M-L., R.C. Rist and E. Vedung: Carrots, Sticks and Sermons. Policy Instruments and their Evaluation. New Brunswick, Transaction Publishers, pp. 249-273.

Bressers, H.Th.A, 1998. The Choice of policy instruments in policy networks. In Peters B.G. and F.K.M.van Nispen (eds): Public policy instruments. Evaluating the Tools of Public Administration. Edward Elgar, pp 85-105.

Supplementary readings

Howlett, M. and M.Ramesh 2003: Studying public policy. Policy cycles and policy sub-systems. Chapter 5. Agenda setting. Policy determinants, ideas and windows. Chapter 6. Policy formulation, policy communities and networks. Oxford University Press, pp. 120-161.

Linder, S.H. and B.G. Peters, 1998. The study of policy instruments. Four schools of thought. In Peters B.G. and F.K.M.van Nispen (eds): Public policy instruments. Evaluating the Tools of Public Administration. Edward Elgar, pp 33-66.

Group work session 3 (Friday June 24, 11.00 – 12.30): National policies and policy measures. Led by Paul Vedeld and Arild Vatn

In this group work, participants will explore experiences with different policy measures at national and local level directed at changing the use of environmental resources. It will be based on a case related to pollution from agriculture

Preparatory reading:

Vatn, A., E. Krogh, F. Gundersen and P. Vedeld, 2002. Environmental Taxes and Politics - The Dispute over Nitrogen taxes in Agriculture. *European Environment*, 12:224-240.

Term paper session (Friday June 24, 14.00 – 16.00)

Groups start working on group paper outline

DAY 6 (June 25): ENVIRONMENTAL GOVERNANCE – COOPERATION AND COMPLEXITY

Lecture 8 (Saturday June 25, 09.00 – 10.30): Cooperating for the Common Good (Elinor Ostrom)

Challenging Supposed Impossibilities and Panaceas Social scientists and policy analysts adopted the prediction of Garrett Hardin in an article in *Science* published in 1968 that the users of a resource were “trapped” in a tragedy of overuse of the resources on which they depended and that they could not extract themselves from this situations. The prediction was consistent with considerable game theoretical analyses of the Prisoner’s Dilemma and the work of Mancur Olson. Thus, many scholars and official presumed that an external agent was needed to solve this problem and impose the optimal solution on the helpless users. Our research has found that users of a resource can frequently – but not always – solve collective action problems. Need a better theory of human behavior and of institutions to explain why some groups solve collective action problems and others do not.

Core readings:

Basurto, Xavier, and Elinor Ostrom. 2009. “Beyond the Tragedy of the Commons.” *Economia delle fonti di energia e dell’ambiente* 52(1) (October): 35–60.

http://sitemaker.umich.edu/ifri/files/beyond_the_tragedy_of_the_commons_economics_of_renewable_energy_and_environment.pdf

Cox, Michael, Gwen Arnold, and Sergio Villamayor Tomás. 2010. “A Review of Design Principles for Community-Based Natural Resource Management.” *Ecology and Society* 15(4): 38. [online] URL: <http://www.ecologyandsociety.org/vol15/iss4/art38/>.

Ostrom, Elinor. 2010. “Beyond Markets and States: Polycentric Governance of Complex Economic Systems.” *American Economic Review* 100(3) (June): 641–72.

Nobel Prize lecture (text):

http://www.indiana.edu/~workshop/publications/materials/Ostrom_Nobel%20Lecture_PPFigures.pdf

Nobel Prize lecture (video):

http://nobelprize.org/nobel_prizes/economics/laureates/2009/ostrom-lecture.html

Supplementary readings

Mwangi, Esther, and Elinor Ostrom. 2009. “Top-Down Solutions: Looking Up from East Africa’s Rangelands.” *Environment: Science and Policy for Sustainable Development* 51(1) (January/February): 34–44.

<http://www.environmentmagazine.org/Archives/Back%20Issues/January-February%202009/MwangiOstrom-abstract.html>

Lecture 9 (Saturday June 25, 11.00 – 12.30): Coping with Complexity (Elinor Ostrom)

Our research has also found that many of the problems that citizens and official want to solve involve complex nested processes that exist at small, medium, and large scales. And, yet, many textbooks in Political Science still look at “the” state as if getting a national government organized is the only challenge we face. While national governments are very important in the contemporary world, without governance arrangements at multiple scales – polycentricity – officials and citizens have a very hard time coping effectively with the problems of contemporary society. Instead of rejecting complexity, we need to grasp the important of building institutions at the diverse scales of the problems we are all facing.

Core readings:

Ostrom, Elinor. 2010. “Polycentric Systems for Coping with Collective Action and Global Environmental Change.” *Global Environmental Change* 20(4) (October): 550–557.

http://www.cemus.uu.se/dokument/CCL_2011/Elinor%20Ostrom.pdf

Ostrom, Elinor. 2011. “Background on the Institutional Analysis and Development Framework.” *Policy Studies Journal* 39(1) (February): 7–27.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1541-0072.2010.00394.x/pdf>

Ostrom, Vincent. 1999a. Chapter 2: “Polycentricity (Part 1).” In *Polycentricity and Local Public Economies: Readings from the Workshop in Political Theory and Policy Analysis*, ed. Michael D. McGinnis, 52-74. Ann Arbor, MI: University of Michigan Press.

http://books.google.co.uk/books?id=iBZ32c7KLWUC&pg=PA75&lpg=PA75&dq=In+Polycentricity+and+Local+Public++Economies+vincent&source=bl&ots=f9yrm1OE7N&sig=I0zINiQAU1HIr4HDAfGYoD02_MY&hl=en&ei=C_WaTbO-HMrrsga2uYCvBg&sa=X&oi=book_result&ct=result&resnum=2&ved=0CB4Q6AEwAQ#v=onepage&q&f=false

DAY 7 (June 27): ENVIRONMENTAL GOVERNANCE IN PRACTICE – CLIMATE CHANGE

Lecture 10 (Monday June 27, 09.00 – 10.30): Science (in)forming policy (Clive Spash)

Science and the role it plays in modern society can be viewed as a highly contested area which many simply ignore. Technology and its development is the most obvious result of scientific research and innovation and this affects all our lives. However, only when disasters occur (e.g., birth defects due to drugs, nuclear power station meltdowns, pollution impacts, space shuttle explosions) do people seem to react and then with some surprise that such things have been on-going. One challenge to science outside

of this norm has been human induced climate change, because the stakes for industry and capitalism are so high. Scientists have then found themselves on the front line of public policy debates and in need of justifying their judgments. Yet the process by which scientific research is conducted remains embedded in a set of methodological myths about empiricism, truth seeking, knowledge creation and risk reduction. Science in the field of public policy can then be seen as embedded in values, interests and beliefs which are being fought over on a daily basis. How then should science be conducted, communicated and controlled? This lecture explores some of these issues in relation to environmental policy.

Core readings

Spash, C. L. 2010. Censoring Science in Research Officially. *Environmental Values* 19 (2):141-146.
<http://www.ericademon.co.uk/EV/EditEV192.html>

Martinez-Alier, Joan, Hali Healy, Leah Temper, Mariana Walter, Beatriz Rodriguez-Labajos, Julien-Francois Gerber, and Marta Conde. 2011. Between science and activism: Learning and teaching ecological economics with environmental justice organisations. *Local Environment* 16 (1):17-36.
http://www.crepeweb.net/wp-content/uploads/2010/10/martinez-alier_ceedec.pdf

Supplementary reading

Kapp, K William. 1961. *Toward a Science of Man in Society: A Positive Approach to the Integration of Social Knowledge*. The Hague: Martinus Nijhoff.
http://www.kwilliam-kapp.de/documents/TaSMiS_001.pdf

Funtowicz, S O, and J R Ravetz. 1990. *Uncertainty and Quality in Science for Policy*. Edited by W. Leinfellner and G. Eberlein, *Theory and Decision Library*. Dordrecht, The Netherlands: Kluwer Academic Publishers. <http://www.radstats.org.uk/no050/funtowiczravetz.pdf>

Nerlich, Brigitte. 2010. 'Climategate': Paradoxical metaphors and political paralysis. *Environmental Values* 19 (4):419-442. [http://eprints.nottingham.ac.uk/1371/1/Nerlich_final_26_5_2010_\(2\).pdf](http://eprints.nottingham.ac.uk/1371/1/Nerlich_final_26_5_2010_(2).pdf)

Spash, Clive L. 2002. *Greenhouse Economics: Value and Ethics*. London: Routledge.

Preparatory reading for participants that are unfamiliar with the topic

Driver, R., Leach, J., Millar, R. & Scott, P. (1996). Perspectives on the nature of science. In Scanlon, E., Whitelegg, E. and Yates, S. (eds) *Communicating Science: Contexts and Channels*, London, Routledge pp.4-26.

Lecture 11 (Monday June 27, 11.00 – 12.30): A Polycentric Approach to Climate Change (Public talk by Elinor Ostrom)

This will be an open lecture as part of Thor Heyerdahl International Day as organized by the Thor Heyerdahl Institute.

Supplementary reading:

Ostrom, E., 2009. *A Polycentric Approach to Coping with Climate Change*. Background paper to the 2010 World development Report. Policy Research Working Paper 5095. The World Bank, Washington D.C.
http://www.iclei.org.mx/web/uploads/assets/Documentos/Ostrom_A_polycentric_approach_for_coping_with_climate_change_1.pdf

Lecture 12 – Case 1: Climate (Monday June 27, 14.00 – 16.00): The evolving climate regime (Steinar Andresen)

The key questions addressed in this lecture are the *effectiveness* of the climate regime and how this can be *explained*. The main components of this regime are the IPCC, the Climate Convention, the Kyoto Protocol and the Cancun Agreement. The main effectiveness indicators used are the normative and cognitive messages spelled out in the regime as well as the output (rules and regulations), outcome (behavioral change) and impact (on the climate system) of the regime. It is crucial to establish a *causal link* between the regime in question and outcome and impact as a host of other factors may play a role here. In explaining performance two main perspectives will be applied, the *nature of the problem* and the *problem solving ability* of the regime. Most emphasis will be put on the latter perspective, conceived of as power, leadership and institutional set-up. The theoretical approach will be dealt with briefly and most emphasis will be given to the process of negotiating this regime, with most emphasis of most recent rounds of negotiations. Who have been the main actors and what positions have they taken and what influence have they had? Also, are there potential alternatives to the UN based approach and what are the likelihood that progress will be made at the next COP during the winter of 2011?

Core readings

Steinar Andresen and Tora Skodvin, The climate regime: Achievements and challenges, in Davor, V and P.J. Schei (eds.) (forthcoming 2011) *The world ocean in globalization* Martinus Nijhoff Publishers
Bodansky, Dan (2011) A tale of two architectures: The once and future U.N. climate regime, Draft, March 7, 2011, Arizona state University.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1773865 (Click on 'One-click download on the top of the page to get the fulltext pdf article)

Supplementary readings

Harrison, K and L. Sundstrom (eds) (2010) *Global Commons, Domestic Decisions The comparative politics of climate change* MIT Press
Oberthur, S and C.R. Kelly (2008) EU leadership in international climate policy: achievements and challenges, *The international Spectator*, 43:35-50
<http://www.informaworld.com/smpp/section?content=a901757139&fulltext=713240928> (online)
<http://www.informaworld.com/smpp/ftinterface~content=a901757139~fulltext=713240930~frm=content> (pdf)
Skodvin, T and S. Andresen (2009) An agenda for change in U.S. climate policies? Presidential ambitions and Congressional powers, *International Environmental Agreements: politics, law and economics*, 9 263-280. <https://uio.no/english/research/interfaculty-research-areas/milen/news-and-events/events/courses/SkodvinandAndresen.pdf>

Term paper session (Monday June 27, 16.30 – 18.00)

Groups continue working on term paper outline

DAY 8 (June 28): POLITICAL ECOLOGY

Lecture 13 (Tuesday June 28, 09.00 – 10.30): Studying environmental governance: a perspective from political ecology (Tor Arve Benjaminsen)

The lecture will introduce the approach called 'political ecology', which is focusing on power relations in environmental governance both in terms of contrasting notions of meaning as well as in competing use of material resources. There is the idea that these two levels are inter-related, interdependent and should be analyzed together in order to understand environmental conflicts and other governance issues. A case of a conflict between Maasai pastoralists and farmers in Tanzania will be presented in order to illustrate this approach.

Core readings

Adger, N.W., T.A. Benjaminsen, K. Brown and H. Svarstad, 2001. Advancing a Political Ecology of Global Environmental Discourses. *Development and Change*, 32:681-715

http://cstpr.colorado.edu/students/envs_5720/adger_etal_2001.pdf

Benjaminsen, T.A., F.P. Maganga and J.M. Abdallah, 2009. The Kilosa Killings: Political Ecology of a Farmer–Herder Conflict in Tanzania. *Development and Change* 40(3): 423–445.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1467-7660.2009.01558.x/pdf>

Supplementary readings

Forsyth, T., 2003. *Critical Political Ecology*. London: Routledge.

Preparatory readings

Robbins, P., 2004. *Political Ecology*. Chapters 1 and 3. Oxford: Blackwell Publishing.

Group work session 4 (Tuesday June 28, 11.00 – 12.30): Different perspectives on environmental governance. Led by Tor Arve Benjaminsen and Arild Vatn

Term paper session (Tuesday June 28, 14.00 – 16.00)

Groups continue working on term paper outline

Term paper session (cont.) (Tuesday June 28, 16.30 – 18.00)

Groups continue working on term paper outline and content

DAY 9 (June 29): ENVIRONMENTAL GOVERNANCE IN PRACTICE – CLIMATE CHANGE/BIODIVERSITY

Lecture 14 – Case 1: Climate (cont.) (Wednesday June 29, 09.00 – 10.30): Climate change – the rise of markets (Clive Spash)

The response to human induced climate change has moved from regulated limits to taxation to markets for trading carbon. This lecture explores the last of these regulatory shifts. The development of both

formal and informal markets now extends worldwide and is worth billions. However, the impact on greenhouse gas reduction has been negligible while the problems created appear considerable. Trading carbon in markets is best explained in terms of the political economy of modern society. This lecture covers the problems it faces and false hopes it offers moving from the economic justifications to the psychological and ethical impacts on individuals.

Core readings

Spash, C. L. 2010. The Brave New World of Carbon Trading. *New Political Economy* 15 (2):169-195.
<http://mpra.ub.uni-muenchen.de/19114/>
<http://sciencestage.com/v/31697/the-brave-new-world-of-carbon-trading.html> (Video)

Supplementary reading

Gilbertson, Tamara, and Oscar Reyes. 2009. *Carbon Trading: How It Works and Why It Fails*. Uppsala: Dag Hammarskjöld Foundation. <http://www.scribd.com/doc/23494095/Carbon-Trading-How-it-works-and-why-it-fails>

Preparatory readings for participants that are unfamiliar with the topic

Lohmann, Larry. 2006. 'Made in the USA': A short history of carbon trading. *Development Dialogue* 48 (September):31-70.

<http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/carbonDDch2.pdf>

Vofß Jan-Peter. 2007. Innovation processes in governance: The development of 'emissions trading' as a new policy instrument. *Science and Public Policy*. 34 no.5 329-343.

<http://docserver.ingentaconnect.com/deliver/connect/beechn/03023427/v34n5/s3.pdf?expires=1302008048&id=62119120&titleid=898&accname=Norwegian+University+Library+of+Life+Sciences&checksum=95EAF23B68C440F2B519DD487D1B4299>

Lecture 15 – Case 2: Biodiversity (Wednesday June 29, 11.00 – 12.30): CBD – how to achieve international consensus (Tone Solhaug)

This lecture will give an overview of the CBD and the current processes ongoing to realize the goals set. Tone Solhaug is a Senior adviser in the Norwegian Ministry of the Environment. She has been National Focal Point for the Convention on Biodiversity from 2000, and has been head of the Norwegian Delegation in numerous meetings. She has also served as chair in many CBD-meetings at different levels.

Lecture 16 – Case 2: Biodiversity (cont.) (Wednesday June 29, 14.00 – 16.00): Biological diversity and genetic resources in international negotiations (Kristin Rosendal)

The lecture touches upon a number of issues relating to biodiversity and genetic resources. Genetic resources are defined as genetic material of actual or potential value. This value stems from biotechnology, such as breeding in agriculture and pharmaceutical research. A number of international treaties with relevance for the management of biodiversity and genetic resources have been agreed to. The Convention on Biological Diversity focuses at the need for conservation and sustainable use of biodiversity and equitable sharing of benefits from use of genetic resources as a precondition to reach this goal. International trade regimes as well as the Food and Agricultural Organization tend to focus on access, use and innovation based on the resources.

The lecture is divided into three main parts: In the first part, I present the issue - the loss and value of biodiversity and genetic resources. Second, I present agreed but diverging objectives emanating from international treaties with impact on the management of biodiversity and genetic resources. In the third

part of the lecture, I discuss how these objectives are implemented, using two theoretical perspectives. Realists predict that dominant actors prevail through forum shopping and stronger compliance mechanisms in the regimes they control. Institutionalists acknowledge some influence from norms and learning in international negotiations working for the benefit of weaker actors also.

Core readings

- Kloppenburg, Jack R., and Daniel L. Kleinman. 1987. "The plant germplasm controversy." *Bioscience* 37 (3): 190–198. <http://www.jstor.org/stable/1310518?seq=1>
- Rosendal, G. Kristin. 2006. "Regulating the use of genetic resources—between international authorities." *European Environment* 16 (5): 265–277. <http://onlinelibrary.wiley.com/doi/10.1002/eet.424/pdf>
- Tvedt, Morten W. 2005. "How will a substantive patent law treaty affect the public domain for genetic resources and biological material?" *Journal of World Intellectual Property* 8 (3): 311–344. <http://onlinelibrary.wiley.com/doi/10.1111/j.1747-1796.2005.tb00252.x/pdf>

Supplementary readings

- Martens, Pim, Jan Rotmans, and Dolf de Groot. 2003. "Biodiversity: Luxury or necessity?" *Global Environmental Change* 13 (2): 75–81. <http://www.lucsus.lu.se/biodivers.pdf>
- Millennium Ecosystem Assessment. 2005. *Ecosystems and Human Well-being: Biodiversity Synthesis*. Washington, DC: World Resources Institute. [http://www.eoearth.org/article/Ecosystems_and_Human_Well-being:_Biodiversity_Synthesis_\(full_report\)](http://www.eoearth.org/article/Ecosystems_and_Human_Well-being:_Biodiversity_Synthesis_(full_report))

Preparatory readings

- Laird, Sarah A., and Rachel Wynberg. 2008. "Access and benefit sharing in practice: Trends in partnerships across sectors." *Secretariat of the Convention on Biological Diversity. Montreal. Technical Series* 38. <http://www.cbd.int/doc/publications/cbd-ts-38-en.pdf>
- Rosendal, G. Kristin. 2006a "The Convention on Biological Diversity: Tensions with the WTO TRIPS agreement over access to genetic resources and the sharing of benefits." In *Institutional Interaction: Enhancing Cooperation and Preventing Conflicts between International and European Environmental Institutions*, ed. Sebastian Oberthür and Thomas Gehring, 79–102. Cambridge, MA: MIT Press. http://ecologic.eu/download/projekte/850-899/890/isa/isa_convention_on_biodiversity.pdf (2003)

Term paper session (Wednesday June 29, 16.30 – 18.00)

Groups continue working on term paper outline and content

DAY 10 (June 30): ENVIRONMENTAL GOVERNANCE IN PRACTICE – FROM THE GLOBAL TO THE LOCAL

Lecture 16 – Case 3: REDD (Thursday June 30, 09.00 – 10.30): From the global to the local – the case of REDD (Arild Angelsen)

REDD provides one of the most illustrative examples of an environmental initiative working cross multiple scales. It was launched as a global initiative in 2005, and much REDD focus is still on the global climate negotiations (UNFCCC). However, some 50 countries have or are currently developing national REDD strategies, and hundreds of local REDD pilot projects have been initiated. This lecture will present the core REDD ideas, and how they spell out at different scales. It will address how REDD as a concept and in its implementation has been shaped by different actors at the different levels, and thereby how REDD looks very different at the global and the local level.

Core readings

Wertz-Kanounnikoff, Sheila, and Arild Angelsen. 2009. Global and National REDD+ architecture: Linking institutions and actions. Chapter 2 in: *Realizing REDD+: National strategy and policy options*, edited by A. Angelsen. Bogor, Indonesia: CIFOR.

The book is available online at: <http://www.cifor.cgiar.org/nc/online-library/browse/view-publication/publication/2871.html>

Supplementary readings

The following chapters in the same edited volume:

Chapter 1: Introduction

Chapter 3: When REDD+ goes national: a review of realities, opportunities and challenges

Chapter 5: Options for national REDD+ architecture Chapter 10: Policy options to reduce

deforestation Chapter 21: The evolving landscape of REDD+ projects

Lecture 17 – Case 3: REDD (cont.) (Thursday June 27, 11.00 – 12.30): National REDD architectures (Arild Vatn)

The aim with this lecture is to discuss the challenges for national implementation of REDD+ and compare a set of ‘generic’ national REDD+ architectures with their capacity to handle these challenges. The architectures compared will be a) market/project based system; b) national funds outside state administration; c) national fund within state administration; d) budget support. Issues concern not least i) overall political legitimacy; ii) effectiveness; iii) efficiency; and iv) capacity to deliver on co-benefits. The literature especially emphasizes the dangers of elite capture and exclusion of rural poor (legitimacy and co-benefits). Also issues concerning leakage (effectiveness) and transaction costs (efficiency) are core. While some conclusions about the direction to take can be drawn on the more general level, what is the better solution for each country involved will depend on a set of national and local factors. Hence, the international REDD+ architecture must facilitate that countries will prefer different national solutions.

Core readings

Thompson, M.C., M. Baruah and E.R. Carr, 2011. Seeing REDD+ as a project of environmental governance. *Environmental Science & Policy*, 14:100-110.
http://www.sciencedirect.com/science?_ob=MIimg&_imagekey=B6VP6-51VXWNH-1-1&_cdi=6198&_user=597823&_pii=S1462901110001619&_origin=gateway&_coverDate=03%2F31%2F2011&_sk=999859997&_view=c&_wchp=dGLzVtz-zSkzk&_md5=1f798f7a4ffe8fca8340a0b0c701f0e5&_ie=/sdarticle.pdf

Vatn, A. and A. Angelsen, 2009. Options for a national REDD+ architecture. In Angelsen A. (eds): *Realising REDD+: National Strategy and Policy options*. Bogor, Indonesia: CIFOR, pp. 57-74. http://www.cifor.cgiar.org/publications/pdf_files/Books/BAngelsen0902.pdf

Supplementary readings

Corbera, E. and H. Schroeder, 2011. Governing and implementing REDD+. *Environmental Science & Policy*, 14:89-99.

http://sciencepolicy.colorado.edu/students/envs_4100/corbera_2011.pdf

Adger, W.N., K. Brown and E.L. Tompkins, 2005. The political economy of cross-scale networks in resource co-management. *Ecology and Society*, 10(2):9. Online URL:

<http://www.ecologyandsociety.org/vol10/iss2/art9/>

Vatn, A., and P. Vedeld, 2011. Getting Ready! A study of national governance structures for REDD+. Noragric Report No. 51, 2009. 56 p.

http://www.umb.no/statisk/noragric/noragric_report_no_59.pdf

Arild Vatn, Pål Vedeld, Jón Geir Pétursson and Ellen Stenslie. The REDD Direction - The potential for reduced forest carbon emissions, biodiversity protection and enhanced development A desk study with special focus on Tanzania and Uganda.

<http://www.umb.no/statisk/noragric/publications/reports/2009-nor-rep-51.pdf>

Term paper session (Thursday June 30, 14.00 – 16.00)

Groups continue working on term paper outline and content. Prepare presentation on Friday

Term paper session (Thursday June 30, 16.30 – 18.00)

Groups continue working on term paper outline and content. Prepare presentation on Friday

DAY 11 (July 01): SUMMING UP

Presentation of group paper outlines (Friday July 1, 09.00 – 10.30)

Presentation of group paper outlines (Friday July 1, 11.00 – 12.00)

Summing up including school evaluation (Friday July 1, 12.00 – 12.30)

Appendix 4

Funding for a Thor Heyerdahl Summer school in Environmental Governance

The calculation is based on 27 participants and a total course length of 12 days. The following details can be offered concerning costs in 2011

Costs:

Teachers:

- Guest lecturers (Ashwini, Farrell, Ostrom ¹)	
- Travel	15.000
- Diet and accommodation	20.000
- Honorarium	75.000
- National guest lecturers (honorarium + travel) (Sending, Andresen, Rosendal)	8.000
- Noragric lecturers (incl. teaching, attendance, supervision and grading)*	136.000
Sum	254.000
Administrative costs etc:	
- General administration/planning (5 weeks)**	150.000
- Development of homepage and flyer (Evy)	20.000
- Various material etc.	4.000
- Publications	20.000
Sum	194.000
Participant costs	
- Travel (27 persons)***	162.000
- Diet and accommodation (700 NOK per person and day) (27 persons)	227.000
- Social program****	25.000
Sum	414.000
Total	862.000

* Including 16.000 NOK for Synne

** Josie/Nicole/Hans (for Hans 3 weeks – 35.000 NOK)

*** 1 from Norway – free. 3 from Scandinavia at 3.000 NOK. 9 from North-Europe at 4.000 NOK. 3 from South-Europe at 6.000 NOK. 11 from the ‘rest of the world’ at 9.000 NOK

**** We plan for one evening advent w/ dinner and a program on the Sunday including lunch and dinner outside of UMB. There is some costs included in the calculation of diet that will not appear if we have dinner/lunch away from campus. These costs would be in the order of 350 NOK x 27 = 9.450 NOK. Hence, this program post is in reality about 35.000 NOK

¹ Ostrom’s travel is paid by THI

Funding sources:

Noragric (Arild Vatn – covered by THI wage)	120.000
Noragric RC (PhD course support)	25.000
Thor Heyerdahl Institute (THI)	200.000
UMB/Research department	100.000
Institutional agreements (countries in the South) (5 x 17.400)	87.000
Norwegian Research Council (NFR)	330.000
<u>Total</u>	<u>862.000</u>