May 2013

Thesis topic brochure





Notes...

http://www.wageningenur.nl/en/Expertise-Services/Chair-groups/Social-Sciences/Environmental-Policy-Group/Education.htm

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Introduction

This brochure

This brochure presents a list of topics or themes for students who wish to pursue their MSc thesis at the Environmental Policy Group. The purpose of this brochure is to attract students to write an MSc thesis within the domain of environmental policy and to provide inspiration to those who wish to formulate their own thesis topic. The ENP group very much stimulates students to develop their own ideas and research questions. The topics presented in this brochure have been identified as interesting topical areas by ENP staff members and can be used as a starting point or source of inspiration while proposing your own thesis topic.

The topics and themes presented in this brochure are often linked to research lines and running projects of staff members. This increases the interest and commitment of staff members in the thesis research and the impact of the knowledge generated. The thesis topics will be presented categorized in the three research areas of the Environmental Policy Group (for an overview see following section). Further information on the content and running projects under each of these research areas check out the ENP website: www.wageningenur.nl/enp

ENP thesis students tend to originate from a broad range of MSc programmes. It is worth mentioning that ENP has a junior position available each year for an excellent MSc thesis student, who are offered a one year contract to develop a PhD proposal and obtain research funding. Also, several ENP supervised MSc theses have been nominated for prizes.

Besides potential thesis topics and themes this brochure includes a list of recently completed ENP MSc theses, a list of companies and organizations where ENP MSc students have recently performed internships, and the next steps in the thesis writing process.

How to get started...

Exploring research topics

If you intend to do an ENP thesis, please explore which research areas or topics you want to address. Use this brochure, the ENP website (www.wageningenur.nl/enp) for research themes the group is currently working on; and browse through previous thesis titles and summaries presented under the education section of the website. Exploring different topics with the thesis coordinator or an ENP examiner is of course also possible.

Contact Education Coordinator at the Environmental Policy Group

As soon as you have made up your mind contact the ENP thesis coordinator Bas van Vliet. After discussing the possible topic(s), and the courses you have followed, he may direct you to a possible supervisor for your thesis within the ENP group. Note that students are only allowed to start a thesis when they have completed their Bachelors and the required ENP courses according to their Masters programme (see study handbook)

Focusing the subject

Once you have made contact with a potential supervisor you will further select and demarcate the research subject. Your supervisor can assist in this step by giving suggestions and literature. Once you have both decided about the topic, you should register as a thesis student.

Registration as a thesis student

To register as a thesis student at the ENP group, you need to submit information on your name, address, thesis subject, and thesis period by email to your supervisor. The supervisor will check the information and forward it to the group's administration. After registration you will obtain a 50 Euro contribution for covering printing costs and you may use the research facilities of the group. For further steps and information check the Student's Guidelines for MSc Thesis Research at the ENP Group:

- Arnika (Environmental NGO), Prague, Czech Republic
- Alliander (Grid administrator) Arnhem
- Arcadis (consultancy firm) Apeldoorn
- Both Ends, Amsterdam
- Centre for Marine Policy, Leeuwarden
- Centrum Landbouw en Milieu, Culemborg
- Embassy of Germany, Dhaka, Bangladesh
- E-On Benelux Rotterdam
- European Centre for Nature Conservation, Tilburg
- Evert Vermeerstichting, Amsterdam
- Fair Politics, Brussel, Belgium
- Haskoning, Nijmegen
- IFOAM EU Group, Brussels, Belgium
- KWR (Water Research Institute), Nieuwegein
- Lisode (water management consultancy), Montpellier, France
- Milieuloket, Utrecht
- Ministry of Agriculture, Nature and Food Quality, The Hague
- Ministry of Environmental Protection, Beijing, China
- Ministry of Foreign Affairs , Water and Environment Dpt., The Hague

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- Oeko Institut, Berlin, Germany
- Rotterdam Municipality, Urban Planning Dpt., Rotterdam
- Stimular, Rotterdam

Internship possibilities are published on the ENP facebook page: http://www.facebook.com/#!/enp.wageningen. For inspiration or more information you can also check the education pages of the the ENP website: http://www.wageningenur.nl/en/Expertise-Services/Chairgroups/Social-Sciences/Environmental-Policy-Group/Education.htm

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Thesis Supervisors



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Energy-wise scan of Rotterdam. A study of domestic energy consumption according to socio and urban variables.

Corporate social responsibility & biofuel production in Ethiopia: five company cases.

Implementing the Plastic Hero. The implementation of the new household plastic waste collection system in the Netherlands under the perspective of the Strategic Niche Management and the Social Practices Model.

Local-scale vulnerability and adaptive capacity to climate variability and change: a case study from Northern Central Namibia.

Towards policy coherence for fish stock conservation in the EU and beyond? An assessment of the Common Fisheries Policy and the EU-Pacific tuna relations domain.

The role of mainstream clothing retailers in stimulating sustainable consumption patterns.

A political analysis of the environmental impact assessment in Taiwan: a case study of the Tseng-Wen Reservoir Transbasin Diversion Project.

Internships (selection)

Another possibility for formulating a thesis topic would be to link it to an internship. Recent developments at public or private organizations where students perform their internship might provide an excellent case study to be worked out in a MSc thesis on environmental policy. If you would opt for a thesis research opportunity associated to an internship thorough consultation with the ENP thesis coordinator is needed. The following organizations have functioned as internship for MSc environmental policy students:

Stakeholder's impacts on co-management of mangrove forests: a case of Zanzibar.

Consumer response to carbon labelling in a food canteen practice. A study towards the integration of carbon labels within everyday social practices.

The provision of Fairtrade products in stores of Dutch retailers.

Clean Development Mechanism Projects in Developing countries: a case study of Nepal.

Sustainability and the Governance System of the Oil Palm Plantation Industry in Indonesia.

Diffusion Patterns of Sustainable Technology Innovations. Constructed Wetlands and Organic Farming in Taiwan.

Consumers and carbon labeling in the food sector – a lifestyle perspective.

Trade offs between credibility and accessibility in the Marine Stewardship Council.

Towards Marine Protected Areas in the Netherlands.

Greening International Shipping through Private Governance. A case study of the Clean Shipping Project.

Dutch consumer interest towards climate labels on food products.

The Clean Development Mechanism (CDM). An analysis of the state of play in Uganda.

Ecological modernization of marine conservation. A case study of two entrepreneurial marine protected areas in Indonesia.

Research programme of the Environmental Policy Group

Environmental Governance and Management: in search for new policy arrangements contributing to sustainable development worldwide

The ENP-research program contributes to sustainable development by developing the theoretical and empirical tools to analyze, evaluate and (help) design democratic processes of environmental transformation from the local up to the global level. Analysing and designing (new) arrangements for environmental governance and management is at the centre of the ENP-research program which is built around three core themes

- 1) The policy and governance related to environmental aspects of (industrial) production and consumption.
- 2) The policy and governance of nature and natural resources;
- 3) The policy and governance of global environmental change The three core themes which define the ENP- research program are depicted in Figure 1.

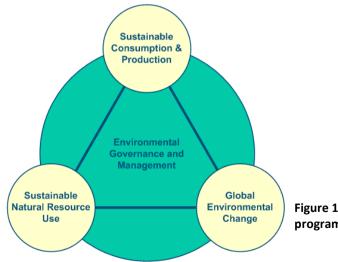


Figure 1: ENP research programme

When analyzing and designing (new) arrangements, we draw especially on sociology and on political sciences. While being social scientific in nature, the research program contains many projects that are conducted on a multidisciplinary basis, making use of the high quality technical and natural science expertise available in the WUR-environment of the ENP-group. The research program forms part of the WIMEK/SENSE research school in the environmental sciences and of the Wageningen School of Social Sciences (WASS). Two defining characteristics of the ENP-research program are its broad geographical scope and the use of an international, comparative approach. Several international research networks are actively supported and directed by the ENP-group.

Previous thesis titles (selection)

Climate policy in Dutch municipalities – organisation, policy, implementation and performance -.

The Op Kop network: A local multi-actor network for making organizations climate neutral.

A Need for Meat? An explorative research amongst flexitarians on the cultural embedding of meat in everyday consumption rituals

Stakeholder participation in European marine policies and their implementation in the Netherlands: the legitimacy of current practices.

A social perspective on renewal energy: crucial factors affecting acceptance and adoption of solar panels in rural communities from Ocotepeque, Honduras C.A.

Governance of Metals Flows from Waste Electrical and Electronic Equipment in the Netherlands.

The Role of Stakeholders in Promoting Outdoor Environmental Education at Primary Schools in Hong Kong.

REDD+ Governance structure in low forested countries: the case of Nigeria. Invasive species policy network. Implementation of invasive species policy in the Mediterranean Sea.

Implementing global environmental policy at the local level: analysis of Reduced Emissions from Deforestation and Forest Degradation (REDD+) preparedness in Ghana.

Institutionalizing climate governance through marked based instrument. The case of the Clean Development Mechanism (CDM) in Honduras.

conservative nature of IMO. The aim of this thesis research can range from is therefore to explaining why and how IMO has shifted from a conservative to a proactive international institution to analysing how this shift from heavy fuel oil to distillate fuels will be managed in practice by the shipping sector.

Contact person: Judith van Leeuwen

The missing target of climate change policies: commercial shippingCO2 emissions from shipping

Commercial ships are the most environmental friendly mode of transportation if you calculate their air emissions per tonnage transported goods. However, this sector contributes for about 2.7% to global CO2 emission and this is still growing. The Kyoto Protocol does not include shipping and has given the International Maritime Organization (IMO) the mandate to come up with reduction targets and measures. Until today, the IMO has not been successful in agreeing on CO2 reduction measures. The proposed thesis research aims could for example be to explain why the IMO has not been able to adopt CO2 targets or measures by studying which factors have impeded decision making within the IMO or which options exist in moving this issue forward within the IMO or under the post-Kyoto regime.

Contact person: Judith van Leeuwen

Thesis topics

Sustainable Consumption & Production

Slow infrastructures in cities: assessing bicycle projects and the role of end-users

In many European cities so called slow infrastructures are being developed partly separated from other traffic flows. Bike projects in Paris, Montreal, Berlin, Copenhagen, Malmo, Sevilla and many other cities show a combination of new infrastructures (bike-paths; docking stations), technologies (bikes, payment systems) and end-users (locals and tourists) which are innovative in kind and in need of evaluation and further improvement. The role of municipal authorities, companies and civil society groups in the development, maintenance and use of these systems is also subject of wide variation. In this research project, students look in some detail at the (future) role of e-bikes in these systems, to the modal-shift-potential of these bike systems, and to the role of end-users in valuing and assessing these systems.

Contact persons: Gert Spaargaren, Jennifer Lenhart, Bas van Vliet

Greening retail practices: food/clothing/appliances

For promoting sustainable consumption practices, the role of retailers (like AH or C1000 in food; BCC or Media Markt in appliances; Bijenkorf or C&A in clothing) turns out of being very important. When retailers offer good quantities and qualities of green products and services, when they inform consumers about green products by using labels, and when they actively seek to connect to the perceptions and images about sustainable development from the side of citizen-consumers, the chances for successfully engaging citizen-consumers in practices of 'buying green' can be significantly enhanced. In this research projects the students contribute to developing green provision strategies of retailers which take into account the ideas, perceptions and concerns of citizen-consumers with respect to green food, green appliances or green clothes.

Contact persons: Gert Spaargaren, Bas van Vliet, Peter Oosterveer, Kris van Koppen

Food price scenarios under food speculation and changing environmental conditions

Food prices are influenced by a number of factors, however, in recent years, the role of financial speculators for food price levels has been increasing considerably. By betting on food prices, speculators can cause their rise, which can render staple foods, such as wheat and maize, unavailable for the poor. Such speculations are said to have been responsible for the 2007 – 2008 increases in global food prices. Together with these food speculations, grain production undergoes considerable changes. Climate change induced water scarcity leads to decreases in productivity, but also land use changes towards biofuels, as well as use of grains for livestock fodder, induce price increases. In this thesis, students will explore the interrelations of food speculations and changing agricultural production conditions, as a complex adaptive system, and explore the consequences of different intervention types, i.e. regulation, on the dynamics within this system. Students are recommended to use Agent Based Modelling for the thesis. Supervision will take place in collaboration with Georg Holtz, University of Osnabrueck, Germany. Contact person: Bettina Bluemling

Globalizing green consumption: developing the international SCP-agenda

Sustainable consumption is no longer restricted to OECD-countries and developed economies. In this project students look at the role and impact of new middleclass-consumers in transition economies in Asia in particular. What strategies for the greening of consumption are used in countries like China, India or Brazil? In what respects do they differ from the strategies applied in OECD-countries when looking at the role of (retail)companies, NGO's, governments and organized citizen-consumers? Contact persons: Gert Spaargaren, Bettina Bluemling, Kris van Koppen, Peter Oosterveer

Institutions of biogas production and use

Around the world, biogas has gained in importance as a renewable energy source. In the case of agricultural biogas production, farms use livestock manure, agricultural residues or energy crops as feedstock to provide

around the world: for leisure and work). In the face of shifting norms and values due to global climate change this combination seems to be incommensurable. Is this incommensurability recognized by tourists? To what extent are tourists, tourism organizers, and tourism regulators aware of the global environmental impact of their traveling behavior, and do they find it problematic? Is there scope for developing carbon budgets for tourists?

Contact person: Machiel Lamers

Environmental governance of transnational cruise shipping

Cruise tourism is the fastest growing segment in the global tourism industry. Cruise tourism is a global and highly mobile activity, with companies operating worldwide and cruise vessel and tourist flows literally spanning the globe on their delivery of tourism products, including the most remote and vulnerable regions. It is an activity of increasing economic importance, but not free from concerns over the scale and distribution of environmental impacts. Cruise tourism takes place in environmentally, socio-economically and politically vastly diverse regions, which raises questions about the sustainability and governability of the activity. Moreover, cruise flows and impacts are difficult to regulate by place-bound governance actors due to their global and mobile character. Nevertheless, cruise activities are targeted by intergovernmental policy processes, industry self-regulation, civil society initiatives, and other governance arrangements that are not recognised in the literature. This thesis topic, aims to assess the dynamics of multi-actor governance arrangements that regulate cruise tourism.

Contact person: Machiel Lamers, Judith van Leeuwen

Moving forward; the fuel transition in Air emissions from shipping

Commercial ships emit lots of SOx, causing air quality problems in coastal areas, because of their use of heavy fuel oil as fuel. The International Maritime Organization (IMO) has negotiated an International Treaty and has set ambitious reduction targets for SOx in 2008. An element of this Treaty is the switch to distillate fuels that contain much less SOx. This ambitious set of reduction targets and measures is remarkable given the

contamination of drinking water in Bangladesh. Since the 1980s, over 10 million shallow tube wells have been installed in rural Bangladesh to enhance access to safe drinking water. In 1993, naturally occurring arsenic was discovered in the groundwater, exposure to which has had significant adverse human health effects. The Bangladeshi government, UN agencies and NGOs have been actively exploring and promoting safe water alternatives. Experience reveals, first, that any technological solution has to be tailored to the varying geo-hydrological and socially diverse conditions of rural Bangladesh; and second, that social acceptability of a proposed solution needs to be considered in parallel (rather than following) wide-spread technological deployment. Yet how this is to be accomplished remains a key scientific and political challenge. The research project focuses on the socio-technical feasibility and acceptability of a new technical innovation to remove arsenic from drinking water, so-called Subsurface Arsenic Removal (SAR) technology. Key questions include: at what scale (household, community-level) is SAR technology most technically viable, and does this match the scales at which it is likely to be socially acceptable? MSc thesis research can analyze past experiences with alternative safe water options (such as the community-led total sanitation initiative, deep tube well use and household-level arsenic removal filters) to identify and assess factors shaping social acceptability and sustainability of these alternatives, as a way to identify lessons for SAR. Fieldwork in Bangladesh may be possible.

Contact: Aarti Gupta

Mitigating the global environmental impact of tourism mobility

The considerable contribution of tourism to global environmental change (i.e. greenhouse gas emissions) has fairly recently started to receive attention from NGOs, researchers, consumers, and policy makers. The role of this growing awareness on tourism consumption, in particular in cases of holiday choice, has not been investigated much. Transport and mobility has a dominant position in tourism practices, in particular for hyper-mobile tourist consumers (i.e. those that go on multiple long haul trips per year). There appears to be a growing group of consumers that wish to be/are green (in their daily lives: food, dwelling), but also hyper-mobile (travel

energy in the form of electricity or gas. Inputs can be subject to a variety of changes within rural society, which is why, especially in developing countries, institutions are necessary to coordinate their supply. Such institutions can be farmers' associations, informal networks or also local markets. In this thesis project, students analyze, in a country of their choice, under which conditions which kinds of institutions are supportive to, or run counter, an effective biogas production and distribution within rural communities.

Contact person: Bettina Bluemling

Urban water management

Megacities in the world have problems with developing the infrastructures for the equitable and sustainable delivery of water services: drinking water, sanitation, transport and purification of sewage water. The research aim of this topic is to analyse the provision and development of urban water infrastructures and services in terms of management, access and use by diverse groups in urban societies, for instance by comparative case study research between various cities in North and South.

Contact person: Bas van Vliet

Households' practices and strategies for coping with water scarcity in Gansu Province, China

ENP and the Rural Development Group, Gansu Academy of Social Sciences, offer the possibility to do MSc research on subjects related to rural households' coping strategies and long-term practices to deal with droughts in Gansu Province, China. Rural households in Gansu employ a variety of practices and short-term strategies, among which out-migration, adjustments in consumption habits, adjustments in land under cultivation or of cropping patterns. Thesis research could make an evaluation of these practices, or strategies, in terms of their resulting changes in environmental impact, economic returns and domestic consumption patterns. Households will pursue multiple interlinked strategies, making their comprehensive assessment an interesting task. Thesis research could provide policy recommendations as to which kinds of households undertake which kinds of practices and strategies, and which policy

measures may stimulate a balanced sustainable development among these households. Since empirical research would be carried out by the MSc student, Chinese language skills are welcomed.

Contact Person: Bettina Bluemling

Electric Bicycles, emerging bike practices, and sustainability

Over the past decade, the E-bike has entered the market for personal transport. Sales-figures are impressive and still growing. However, the relationship between E-bikes and sustainability is as yet unclear and little specified. On the one hand, there is the e-bike promoted by employers to green short-distance commuting practices of their employees. On the other hand there is the e-bike expanding the scope of recreational travel both in terms of distance and lifestyle-groups. On the one hand there is the e-bike as new, crucial element of transport chains making possible the modal-shift towards low-impact transport. On the other hand there is the e-bike substituting (wo)man power for electricity and thereby contributing to more CO2 emission. In this research project we investigate the new transport practices made possible by the E-bike, the sustainability aspects of increased e-bike use, and the relationships between bike-design, user-practice and the lifestyles of the bikers involved.

Contact persons: Gert Spaargaren, Jennifer Lenhart

Labels and certification in food provision

The number of food labels and private certification schemes as instruments for promoting sustainability is growing fast (carbon-labels, animal welfare schemes and biodiversity-conservation indications like MSC). There is need to compare different labels and certification schemes in terms of their performance, their organisation and of their relationships with consumers. Concrete topics include: what is the impact of fair-trade labelling on producers in developing countries; what are the perspectives for carbon labelling of food; is MSC turning into a hybrid public-private standard?

Contact person: Peter Oosterveer

Food, feed or fibre?

Industry Transparency Initiative, Carbon Disclosure Project, or the Aarhus Convention on Access to Environmental Information.

Contact person: Aarti Gupta

A science-society contract in global environmental governance?

Several topics exploring the role of science in global environmental politics are possible. Whether and how science can be separated from political decision-making processes remains a long-standing and controversial but ever more relevant debate in global environmental governance. In exploring the nature of science-politics interactions, MSc thesis research can focus, for example, on the sources of legitimacy underpinning innovative global mechanisms such as the IPCC, which is designed to provide policy-relevant scientific input into decision-making processes on climate change. Additional foci can include institutional design, credibility and sources of legitimacy of scientific input into global biodiversity or biosafety governance arrangements.

Contact person: Aarti Gupta

Global-local links in multilevel environmental governance: climate, biofuels and biodiversity policies in India

MSc thesis research can analyse complex links between evolving global environmental governance arrangements (relating to climate change, biodiversity or biofuels) and national regulatory policies and responses, with a focus on India. India is an active participant in global climate policy discussions and has recently announced a multi-dimensional climate change mitigation and adaptation strategy. MSc thesis research can analyse the evolution of this strategy and its links to global climate policy developments. Similar research is possible for national-level biofuels or biodiversity policies.

Contact person: Aarti Gupta

Arsenic contamination of drinking water in Bangladesh: social acceptability of arsenic mitigation technologies

MSc thesis research is possible in line with an on-going research project on social acceptability of technological innovations to address arsenic

can explore how these questions are being addressed in emerging global and national-level MRV systems for REDD.

Contact person: Aarti Gupta

Transparency and accountability in global environmental governance How to ensure the accountability of global environmental governance arrangements (both public and private) remains an important focus of scholarly research and political debate. One widely assumed means to enhance accountability is through promoting greater transparency. Increased transparency is assumed to help empower the weak and hold accountable the powerful, primarily through correcting for informational asymmetries between the governors and the governed. Transparency is also increasingly relied upon to further specific regulatory aims, such as promoting environmental improvements or better sustainability performance. Yet, does transparency deliver on its promises? Ongoing research emphasizes various dis-functionalities of disclosure-based global governance, including disclosure of incomplete or unreliable data, shirking of disclosure obligations, a lack of capacity to interpret and use disclosed data, the phenomenon of "drowning in disclosure" when too much (or irrelevant) information is provided, or lack of civil society or other intermediaries to render disclosed information useful. Thus, the ideal of transparency may not match up its practice. While positivist analyses of transparency suggest that this is because transparency has not proceeded "far enough, fast enough", a more critical perspective suggests that transparency's effects have to be analyzed in the broader political context within which it is being deployed. In the global sustainability realm, a growing embrace of transparency can be linked to a liberal democratic push for individual liberty, choice and participation in state-society interactions, together with a neoliberal privileging of market-based solutions to sustainability challenges. MSc thesis research can explore these different perspectives on transparency through analyzing the design, functioning and impacts of various global governance by disclosure initiatives, where transparency is central. These include, for example, the the Global Reporting Initiative, Publish What You Pay, the Extractive

Agricultural resources are increasingly not used for producing food, but also for producing animal feed, energy, or other industrial products. These different uses put an increasing claim on limitedly available natural resources, such as water, phosphates and energy. These challenges call for ways to address the sustainability of these different uses and leads to debates on how to prioritise between them. The growing complexity of the associated supply chains presents an extra complicating factor. Thesis research may be oriented to compare different governmental and market-based tools available to promote sustainability under these conditions. Concrete topics for thesis research are: what ways to deal with the production and use of biofuels; the climate impacts of producing and consuming meat and how to address them; how to relate technological optimal use of available natural resources in the agro-supply chain to actual use by relevant social actors?

Contact person: Peter Oosterveer

National Food Strategies and Sustainability

In recent years, an increasing number of countries, including UK, Canada, Kenya, Botswana, Malawi, is developing a national food policy. Next to producing sufficient food, many of these strategies also address sustainability in some respect. In a thesis, such national food policies can be compared and reviewed with regard to the way they address sustainability and food and agriculture and what roles are assigned to different stakeholders in the implementation process.

Contact: Peter Oosterveer

Food risks and food production

Changes in food production may lead to unanticipated (human) health risks, examples are BSE and Q-fever. Promoting more sustainability in food provisioning may lead to transitions in food production and therefore increase the potentiality for unexpected risks. This thesis reflects on these developments and what this would mean for risk management that combines food safety, human health, agricultural production and industrial processing.

Contact: Peter Oosterveer

Brownfield re-development

Many cities in the world are facing the diminishing role that (heavy) industrial production has had since the Industrial Revolution. Instead they are growing into global centers of communication, services and entertainment. The reconstruction of brownfields (old industrial areas) in or close to city centers can be combined with the challenge to green a city. Although attractively located close to city centers, brownfields are often heavily polluted and expensive to be taken into new uses. They may contain industrial cultural heritage sites that can be re-used for other purposes, be it against high costs. A thesis research could include case study research into brownfield redevelopments in particular cities of student's choice.

Contact person: Bas van Vliet

Plastic Waste Management and the end of plastic bottle deposit systems

The Dutch packaging industry has successfully lobbied for the abolishment of the compulsory deposit system for plastic bottles. Policies for handling plastic packaging have for long been shaped by covenants between and transfer of responsibilities from the government to the plastic packaging industry. For instance the plastic waste separation at source and recycling system ("plastic hero") is initiated by the industry in a bid to avoid more stringent governmental regulation on plastic packaging and waste management. The abolishment of the deposit system could be seen as a success for the plastic waste industry. Thesis research may be oriented towards questions on horizontal policy making and covenants with industries, using a policy arrangement approach or policy evaluation framework. A discourse analysis may shed light on positions taken by several parties (local and central government, environmental, consumer organisations, supermarkets, packaging industry) on the pros and cons of deposit systems for consumer packaging.

Contact person: Bas van Vliet

sustainable use, through compensating developing country forest owners and users for the carbon stabilized in standing forests. Important global REDD+ initiatives include the Forest Carbon Partnership Facility of the World Bank (FCPF) and the UN-REDD programme. Both are actively supporting developing countries in preparing for REDD+. Yet many questions about REDD+ remain, including whether it can deliver so-called co-benefits (i.e. reduce carbon emissions and improve forest governance/ reduce deforestation). MSc thesis research can focus on various aspects, including: the prospects of different REDD design options to deliver co-benefits; the evolution and practices of specific global REDD+ initiatives, such as the World Bank's FCPF or the UN-REDD programme; debates and developments relating to REDD+ in a specific developing country such as India, Indonesia or Ghana etc.; and how private governance initiatives such as the Forest Stewardship Council are interacting with REDD+.

Contact person: Aarti Gupta

Reduced Emissions from Deforestation and Degradation (REDD): the politics of monitoring, reporting, verification

With REDD being embraced globally as a win-win strategy to address both carbon emissions and forest loss, there is now an acknowledged need for effective monitoring, reporting and verification (MRV) systems to underpin REDD. Yet many aspects of these MRV systems continue to be debated: should there be one international or multiple national MRV systems? What should be measured, how and by whom? A properly functioning MRV system requires baseline data on carbon emissions, against which the additionality and impacts of REDD interventions can be measured. For example, it needs to keep track of changes affecting forest carbon, including conversion of forest land to other land uses. An often-cited problem with MRV systems, however, is that such baseline data is lacking. Furthermore, what constitutes equitable and efficient MRV systems is not only a technical but also a political question. MRV systems include not only earth observation data but also socio-economic data on drivers of deforestation and biodiversity loss. Who gathers and interprets such data? Who has the authority to decide what data to gather, which stakeholders to consult, and for whom to make the data available? MSc thesis research

Global Environmental Change

Climate Scepticism and the policy discourse

How does 'made in the USA' climate scepticism influence the European and Dutch public and policy discourse? Although the scientific evidence of man-made climate change is overwhelming, climate scepticism or even denial flourishes in the public and policy debate. Arguments that have long been proven wrong in climate science, continuously pop-up in the media and in policy making debates. It is increasingly well-known and welldocumented, that a network of think-tanks, front groups, echo-chambers and the like produce and spread vast amounts of climate disinformation and doubt-mongering articles, reports and books. These think-tanks are mainly free-market advocacy institutes, and are predominantly paid by vested interests and wealthy individuals promoting a specific ideological agenda (free-market, religious, conservative). The recipe is that of the tobacco industry lobby. Increasingly, but still less than in the US, climate scepticism is finding its way in Europe, including (and may be even more than its neighbouring countries) the Netherlands. Preliminary research (http://www.gemeynt.nl/files/Pb2011-007.pdf) reveals connections between the US anti-science and doubt industry and some European and Dutch skeptics and sceptical organisations. However, research has yet to take off. The aim of this theme is therefore to investigate the ways through which 'made in the USA' climate scepticism finds its way to Europe and particularly the Netherlands. What is the role of networks and personal contacts, what is the role of the media, how is the discourse being influenced?

Contact person: Jan Paul van Soest (<u>janpaul.vansoest@wur.nl</u>) and Jan van Tatenhove

Reduced Emissions from Deforestation and Degradation (REDD): generating co-benefits?

REDD is being widely embraced by policymakers, funding agencies and other actors as a promising strategy to cost-effectively reduce greenhouse gas emissions in addressing climate change. REDD (and its successor REDD+) aims to create financial incentives for forest conservation and

International production and consumption chains of aquatic products

The Environmental Policy Group and Environmental Toxicology Group are interested in finding students to work on an interdisciplinary thesis topic around the international production and consumption chains of aquatic products. The research will focus on the politics of food safety, health claims and sustainability certification in an aquatic product of choice. One example is the Dutch eel fishery in Zeeland, in which aspects of ecological sustainability and food safety are increasingly questioned. A second is the prevalence of methyl mercury in the Marine Stewardship Council (MSC) certified Albacore Tuna fishery.

Contact person: Simon Bush

Consumers in search for Sustainable Fish: the fish-wallet-card

Since the development and introduction of the Marine Stewardship Council (MSC-)label for sustainable fisheries, the consumer is gradually offered a choice to 'make a difference' when buying and consuming fish. The fish-wallet-card as available on the internet and in printed form also is designed to support (organized and individual) consumers to support the shift to sustainable production and retail practices in the fish-sector. In this research project, we explore the penetration rate and the use of the fish-wallet-card (and similar devices) in different practices of selling, buying and consuming fish. On the fresh-market, in the restaurant and in the supermarket information about (non)sustainable fish products is organized and used by providers and consumers in particular ways. To what extent and in what ways can consumers become 'empowered' with information in order to use their green buying power for promoting the production and retail of sustainable fish?

Contact persons: Gert Spaargaren, Peter Oosterveer, Simon Bush.

Does participation in regional management organizations lead to better tuna governance?

Demand for sustainably-sourced seafood has led to the creation of numerous certification schemes and consumer awareness campaigns. The Marine Stewardship Council (MSC) is widely-known across the globe as the standard in sustainable seafood. One of their principles in assessing

sustainability revolves around governance, and the need for national controls and, when applicable, international cooperation. For tuna fisheries to be certified, the MSC requires that the countries fishing shared tuna stocks be members of the regional fisheries management organization (RFMO) in their area. Evidence suggests, however, that few, if any, tuna RFMOs have led to increased sustainability of their target stocks. This raises the question then if the MSC standards for effective governance, in requiring RFMO membership, actually lead to sustainability gains, or if perhaps a different standard is required. Three students are sought to examine MSC-certified fisheries in the Maldives (pole and line skipjack), Fiji (longline albacore) and Papua New Guinea (PNA free school purse seine skipjack) and assess the degree to which membership in the relevant RFMO brought about any increases in governance changes, or improvements in the sustainability of the resource with respect to these fishing nations. Results from this work may help to improve the MSC program, or to help foster alternative certification schemes more suitable for shared stocks.

Contact person: Megan Bailey

Sustainability of bait fisheries in Indonesia and Maldives

Tuna caught with pole and line gear has been identified as a sustainable product by environmental organizations and by the European market. Pole and line tuna fisheries in the Maldives, for example have recently been certified the Marine Stewardship Council (MSC), and the fishery in Indonesia is currently going through MSC pre-assessment. Pole and line fisheries are reliant on auxiliary live bait, however, which has raised some sustainability concerns. Ratios of the amount of tuna caught per kg of bait used range from about 9-25 kg (fish in fish out, or FIFO), and large uncertainties exist around FIFO estimates for Maldives and Indonesia, and what factors influence FIFO ratios. Many differences exist between the bait practices in these two countries, with the Maldives tuna fishers catching their own bait, often of several different species, while fishers in Indonesia buy their bait on their way to the tuna fishing grounds, and it is usually an anchovy species. Thus, in addition to ecological differences in bait fisheries, economic differences also exist. Students (2) involved in this

monitor public awareness? How to link love for nature to sustainable practices, e.g. environmentally-friendly consumption. The thesis research aims at deepening our insight in such questions by theoretical clarification and specific case studies.

Contact person: Kris van Koppen

Nature biographies in social context: how do we learn to appreciate nature?

Several topics are possible within the field. The guiding question is how people shape the ways they deal with nature (recreate, study, protect, ignore, fear) over the course of their life. A basic hypothesis is that participation in social practices is a key factor in such learning practices. An important societal motive for researching this issue is concern about the continuity of public support for nature conservation and environmental protection.

Contact person: Kris van Koppen

environmentally friendly, economically viable and socially desirable means of payment for ecosystems and to formulate policy recommendations on how conservation enterprises can be enhanced for community livelihood improvement and nature conservation.

Contact person: Machiel Lamers

REDD+ and tourism: bundling payment schemes for ecosystem services

As global measures taken to mitigate climate change impacts, such as REDD+, are implemented in local settings, they are starting to influence and reshape institutional arrangements for natural resource use and nature protection. At the local level, communities, entrepreneurs, and nature protection organisations are increasingly witnessing how income and effects of REDD+ encounters with income and effects generated from nature-based tourism. For example, East-African countries, including Kenya, are the front-runners in developing REDD+ related activities as well as major nature-based tourism destinations. In addition to tourism income, commercialization of carbon credits through REDD+ are expected to deliver numerous livelihood and ecosystem benefits. In Kenya, the proposed Mbirikani Group Ranch REDD project and the already implemented Kasigau Corridor REDD project have a strong focus on biodiversity conservation and have integrated elements of ecotourism in their project designs. What these encounters mean for local actors and what will be the joint effects (synergies or conflicts) for nature protection is insufficiently known. The integrated analysis of the financial contribution of tourism and REDD+ to nature conservation will contribute to the debates on the concepts of co-benefits and 'PES bundling', which refers to the combination of different Payments for Environmental Services schemes to finance conservation.

Contact person: Machiel Lamers

Public awareness and participation in nature and biodiversity protection

Several thesis topics are available in this field. The importance of public engagement in biodiversity protection is broadly acknowledged, but the concrete achievements in this field are modest and social scientific insights are underdeveloped. How to stimulate public engagement? How to

project will research the bait fisheries in Maldives and Indonesia. Data on bait species, catches of bait fish, and catches of tuna will help improve estimates of the FIFO for each fishery, and provide scientific information for certification bodies as they go forward in deciding on sustainability standards for pole and line fisheries. Furthermore, these studies together will help elucidate the factors that lead to a higher FIFO, which is favourable from an ecological and economic perspective.

Contact person: Megan Bailey

Vertical cooperation and tuna fisheries management

Several studies have shown that regional or international cooperation among fish producing nations leads to improved sustainability and increases economic benefits in the long-term. Non-cooperation and partial cooperation still exist in many fisheries, however, meaning that producing nations may not explicitly recognize the benefits of cooperation. It has been argued that the short-term costs of cooperation are just too high. This research will study the extent to which cooperation can be better incentivized by the inclusion of downstream actors when calculating cooperative and non-cooperative payoffs. Specifically, thesis work here would ask questions around the benefits that tuna fisheries in the Pacific create, by analysing the economic value of fisheries production sector (the catch), the processing sector, and trade. In addition, benefits associated to employment and domestic consumption will be analysed. Do short-term benefits, and not only costs, result from cooperation, but they just have not been identified or quantified yet? Field site possibilities vary, but could include Indonesia and the Philippines. This research would contribute to discussion over why cooperation in resource management, when tackled from just the production level, is hard to achieve.

Contact person: Megan Bailey

A perfect beach? Assessing certification schemes for beaches

Coastal zones around the world are intensively used by tourists and the tourism industry. It is therefore not a surprise that a substantial share of the private environmental governance efforts focus on one of its main attractions: the beach. The Blue Flag certification programme is one of the

oldest types of certification in the tourism sector and well known across the world. To date, there are 3009 beaches and 639 marinas awarded the Blue Flag worldwide. However, little academic analysis exists on the processes and outcomes of this certification scheme. For example, how do global certification criteria used relate to local cultural interpretations of the beach? How are local beach managers across the world disciplined by global certification schemes and how much leeway is there in the process of implementation? Case studies are foreseen in Yalta (Black Sea region) and along European and Caribbean coastlines.

Contact person: Machiel Lamers, Simon Bush

Conceptualization of and policy instruments for sustainable tourism supply-chains

Organizational actors like nature conservation and development organizations, governments and tour operators are increasingly exploring how tourism can address the loss of biodiversity, environmental pollution, improvement of local livelihood and regional development. The sustainability challenges of tourism practices are increasingly tackled by introducing new institutional arrangements like eco-labels, certification schemes, public-private partnerships and social enterprises. The aim of this thesis topic is to analyse the role of these new policy instruments in the creation of a more sustainable tourism product supply chain.

Contact person: Machiel Lamers

The science-policy interface of sustainable tourism

Many research projects in the field of global change and sustainability have the ambition to impact or change society and policy. Produced knowledge is not always used in the way that researchers foresee or wish. There are many uncertainties and vested interests often play an important role in the policy domain. Produced knowledge often does not meet the expectations of policy makers and decision makers. According to recent literature the connection between the science domain and various policy domain can be strengthened by intensive cooperation between and within both worlds in the production of relevant knowledge. In practice, these collaborations are challenging due to diverging expectations, mismatching

and problems of legitimacy.

Contact persons: Jan van Tatenhove, Judith Floor

Sustainable tourism policy making at the transnational and supranational level?

Sustainable tourism development is a contentious societal and academic topic, subject to numerous definitions and different (implicit) objectives. Objectives range from actively supporting tourism in developing and tourism-dependent regions, and balancing economic benefits and social and environmental costs, to discouraging tourism development on ecological grounds. To realize sustainable tourism a level playing field must be created which calls for regulations at higher governance levels. Such level playing fields can be created both by state and non-state actor arrangements, for example the state-based European Union or Antarctic Treaty System, as well as the market-based Travelife certification system. The aim of this thesis topic is to analyse how these state or non-state systems attempt to standardize tourism practices and minimize impacts, by analysing policy documentation and carrying out interviews with key representatives. The multiple perspectives on sustainable tourism will function as a theoretical framework to categorise and analyse the issues raised in these policy processes.

Contact person: Machiel Lamers

Nature Entrepreneurship: Tourism and nature conservation

Achieving sustainable development not only requires technological breakthroughs, but also institutional innovations. The concept of "institutional entrepreneur" in institutional theory refers to the actors who bring about such innovations. Organizational actors like nature conservation and development organizations, governments and tour operators are increasingly exploring how tourism can address the loss of biodiversity and persistent poverty by introducing novel institutional arrangements. This research adopts a case study strategy to examine institutional entrepreneurship in nature-based tourism in African, Asian and European contexts. This research aims to assess the potential of nature tourism entrepreneurs (for example luxury eco-lodges) as an

Deep sea mining

Deep sea mining is an industrial activity in its infancy. The international structure to regulate this activity is however already in place since 1994 when the International Seabed Authority was established (as part of the UN Convention on the Law of the Sea. What are the environmental risks associated with deep sea mining and is this already debated and by whom? What kind of companies are interested in deep sea mining? How will the International Seabed Authority regulate this activity? The USA does not recognize this organization, what does this mean for its mandate or for the USA when it comes to deep sea mining? What is the role of national governments in regulating deep sea mining? What is the role of environmental management in future environmental governance for this activity? Given these uncertainties, MSc thesis research can contribute to the debate on effective governance for deep sea mining.

Contact person: Judith van Leeuwen

Scientific uncertainty and political decisions in nature conservation of the Westerschelde

Nature development to support the estuarine nature of the Westerschelde has been a very controversial topic in Zeeland, the south part of the Netherlands. The Westerschelde is the main river for ships going to the harbour of Antwerp, Belgium. At the same time the Westerschelde is a unique estuarine ecosystem that is protected by the EU Birds and Habitat directive. The recent political controversy has been around the plan to create new estuarine nature by displacing dykes (in Dutch 'ontpolderen'). This plan was confronted with an effective local protest in 2005 and has since been a precarious topic for national politics. Part of the controversy have been the uncertainty of the ecological impact of the nature development and possible alternatives to create estuarine nature. Thesis research could focus on the science-policy relations in this case. The use of (scientific) uncertainty to delay political decisions. The power of nature organisations on nature policy and their limitations. The accessibility of knowledge and the consequences for decision-making. The role of EU nature legislation and the perception of the legislation by actors. Other possible topics are the relation between different layers of government,

process cycles, and institutional frames. The tourism sector is generally known as lagging behind in implementing sustainability measures. How the interface between the tourism sector and the scientific domain is organized is also insufficiently known. Students are invited to write a thesis about the possibilities and limits (theory and practice) of knowledge coproduction, knowledge brokering, or other strategies used in the science-policy interface of sustainable tourism.

Contact person: Machiel Lamers

Weekend trips to escape from hectic urban life – the rural tourism program NongJiaLe in China

To escape the buzzing hectic of Chinese urban life, Chinese urbanites increasingly take a weekend off in the countryside. The Chinese government has set up a program called "NongJiaLe" or "Farmer Happiness" in which it subsidizes villages to improve village infrastructure and commodify their regional culture and/or agricultural products. Students are invited to analyse the way rural villages are reshaped according to the aesthetic expectations of urban populations. What are the expectations of Chinese visitors to these rural villages? Does (and how does) the aesthetic reshaping of Chinese rural village lead to a Chinese tourist gaze or staged authenticity? Does the programme lead to negative environmental impacts or rather increased environmental quality in these rural destinations? How does the programme ensure the balance between scenic qualities, local livelihood, environmental impacts, and congestion? What policy instruments are used to manage visitation to rural villages in the programme? Being able to conduct fieldwork in China and communicate in Chinese is a prerequisite for this thesis topic. Contact person: Bettina Bluemling, Machiel Lamers

Citizen learning and municipal environmental policy

The importance of social learning processes for sustainability transitions is widely acknowledged. Only rarely, however, social learning for sustainability becomes an explicit target of policy. Under this thesis topic, we explore how social learning can be promoted by municipality in more explicit and effective ways. Evidence from social research suggests that

learning processes are most effective when they are close linked to practices in which citizens are actively involved. In the context of municipal policy, environmentally relevant citizen practices include electricity use (smart meters), waste separation, gardening, transport, and others. Thesis research will focus on one or more of these practices and investigate how municipalities can more effectively design and promote social learning processes around activities that citizens are involved in. Research methods can be a mix of policy analysis, expert interviews, citizen surveys or focus groups, and policy design.

Contact person: Kris van Koppen

Brand vulnerability index -a response to environmental NGOs

NGO pressure on companies to improve their environmental performance has never been greater. Bad publicity can lead to considerable damage to the image of a company and their brand. One response has been the brand vulnerability index - a measure for companies looking to better understand and quantify the risks that face their brands and assess their position relative to their competitors. Is this a defensive strategy by companies or a proactive means of ratcheting up their performance? What Implications does it hold for NGOs that base their advocacy strategies on challenging the reputation of brands? Students are invited to take on these challenging questions in Europe with a focus on issues related, but not limited to, sustainable palm oil, sustainable fisheries, child labour and organic textiles.

Contact person: Arthur Mol, Peter Oosterveer, Simon Bush

environmental governance strategies for this pristine area of the world. Questions throughout this challenge will be among others: who will be able to take decisions on activities that will take place in the High Sea parts of the Arctic. What is the role of indigenous communities in the economic development and development of environmental governance strategies. How will Ecosystem-based management be operationalized for the Arctic? And how will external interests from China, the EU, but also from environmental organizations influence future governance arrangements for the Arctic? MSc thesis research can contribute to the debate on effective governance for sustainable development of the Arctic.

Contact person: Judith van Leeuwen

The Science of Zoning: informational governance in Antarctic spatial policy making

Human activities in Antarctica, such as scientific programmes, fisheries and tourism, have increased substantially over the last two decades, and is expected to continue to attract interest from other economic sectors due to climate change. In response, a variety of zoning policies (i.e. protected areas, specially managed areas) have been established at different spatial scales (i.e. sites, areas, larger marine regions) for the conservation of the Antarctic environment. An important and ill-studied feature of establishing these zoning policies is the information processing by different coalitions of actors, such as states, industries, scientists, and environmental NGOs. This thesis topic aims to analyse how information is used by a range of actors in the establishment or refinement of zoning policies in the Antarctic. The project will be informed by an informational governance framework that combines recent insights in policy formation processes on the emerging role of non-state actors and on the changing role of information. Interesting cases for analysis include the development of site specific guidelines (Antarctic Peninsula), Antarctic Specially Protected Areas, Antarctic Specially Managed Areas (e.g. Deception Island, Admiralty Bay, Fildes Peninsula), Marine Protected Areas (e.g. South Georgia, Ross Sea). Literature and document survey as well as interviews with key actors will provide a diverse database for analysis.

Contact person: Machiel Lamers

Marine Infrastructural Projects: new ways of building with nature

Marine Infrastructural projects (MIPs) are large construction works in a marine environment, such as the development of ports, land reclamation, the construction of islands and all kind of constructions of flood protection. More and more environmental objectives are taken in consideration in the development of these projects. An example is the Dutch innovation programme program "Building with Nature". The focus of this programme is an understanding of the specific ecosystem dynamics, and taking them as a basis for the design of the project. The program focuses on developing 'eco-dynamic design principles'. These are the technical building blocks that allow practitioners in the field to plan and design marine infrastructural projects using ecosystem based dynamics. This research projects evaluates the possibilities of building with nature in Marine Infrastructural projects.

Contact persons: Jan van Tatenhove, Dorien Korbee

The modern tragedy of the commons; solutions for the garbage patch

Our plastic waste ends in a garbage patch on the Pacific ocean. It causes ecological damage and poses threats to our food web as plastic particles are mistaken for plankton by marine life. Plastic does not degrade easily and stays within the environment for hundreds of years. It is a so-called wicked environmental issue, because the source of pollution is diffused over many industrial and non-industrial activities. Developing environmental policies to deal with this issue is therefore challenging. This MSc research project could investigate this environmental problem in more detail and seek to propose potential ways to address this problem. Contact person: Judith van Leeuwen

The Arctic as new frontier for environmental governance

The Arctic is attracting global attention because of accelerating rates of melting (summer)ice. Rapid economic development in the region could be reality before we know it. The main economic activities that may evolve are shipping, oil and gas production, tourism and fisheries. Currently, no clear regulatory structure exists to deal with the ecological effects of these activities. That means that now is the time to develop effective

Sustainable Natural Resource Use

Indigenous Social Movements against Mining – assessing the impact of their trans-nationalization:

Resistance to the land acquisition initiatives of mining companies in developing countries, particularly by indigenous communities that claim a historical and emotional relationship with their environment, is becoming more and more trans-nationalized. International civil society actors connect with grassroots social movements of this kind in order to articulate a glocalized alter-globalization. In the process indigenous land struggles are romanticized and mediatized in the international public sphere – making their resolution a diplomatic concern and opening up space for international conventions and domestic policy-making to find points of intersection and rupture. How does this impact the articulation of local struggles – are indigenous peoples' voices somehow appropriated? How much can they make use of trans-nationalization for the success of their struggles on the ground? Fieldwork in India and in European contexts of the trans-nationalization of indigenous struggles, would be possible. Contact person: Radhika Borde, Bettina Bluemling

Negotiating the commons

In a number of cases, conflict resolution and multi-stakeholder dialogue processes have been applied in order to solve complex environmental problems affecting economic interests. Some processes lead to solutions embraced by many actors (e.g. Wadden Sea gas production and shale fisheries/mussels fisheries), some to outcome that at least opened a window for political decisions that was closed so far (e.g. life-time extension nuclear power plant Borssele), some stalemate situations led only to partial and limited solutions (e.g. coal-fired power plants Eemsdelta region). A variety of factors seems to determine success and failure:

- The potential to create a so-called win-win-situation
- Perceptions of the situation and potential outcomes of a negotiating process by stakeholders, room to manoeuvre
- The power base of each of the stakeholders, including the legal bottomline/BATNA (Best Alternative to Negotiated Agreement)

- Openness and trust in each other and in the process, transparency versus hidden agendas.
- Personal leadership and drive to reach agreement rather than conflict
- Institutional barriers and enablers that inhibit some and promote other solutions

Although failure or success in environmental conflict resolution processes can cost or save society billions of Euros, empirical analyses and theory building are in their infancy. Aim of this subject is therefore to:

- Analyse cases (Wadden Sea, Coal-fired power plants, Nuclear, or other examples) in terms of crucial factors determining process and/or outcome
- Contribute to theory building

Contact persons: Jan van Tatenhove, Jan Paul van Soest

Sustainable management of tuna fisheries in the coral triangle

Tropical tuna are under significant pressure from overfishing. Traditionally states have been responsible for regulating fishing activities, but the private sector and NGOs are increasingly becoming involved through third party initiatives such as the Marine Stewardship Council (MSC) and FairTrade, and a large number of first part brand initiatives such as the International Sustainable Seafood Foundation (ISSF), Fish4Ever and Sustunable. As part of the BESTTuna programme we are looking for students to investigate the new roles of these actors in shifting tuna fisheries management from regulatory to 'incentivised' management approaches. Field work sites are negotiable but can include Indonesia, the Philippines, Thailand, and Western Samoa.

Contact person: Simon Bush

Politics and practice of sustainable aquaculture in South East Asia

Global aquaculture production is fast approaching 50% of global capture fisheries production. The implication is that fish farming is not only an important source of aquatic protein for people in heavily populated regions of the world such as Southeast Asia, but also in large consumer markets such as Europe. The growth of specific species such as shrimp, pangasius and tilapia is thought to have placed enormous pressure on the

The designation and implementation of networks of Marine Protected Areas (MPAs)

Marine Protected Areas (MPAs) are "Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment" (IUCN 1988). Marine Protected Areas are specified areas in which there is partial or total protection from fishing and other potentially damaging impacts (e.g. dredging, drilling). Objectives are stock maintenance or recovery habitat restoration, protection of non-target species, and development of recreational and educational activities and promotion of scientific understanding. This topic focuses on the designation and implementation of MPAs in different countries. A new trend is the move beyond individual MPAs to more carefully designed networks of ecologically-connected MPAs at larger scales that can help to sustain and to restore marine populations. Thesis topic can vary from an evaluation of the designation and implementation of MPAs to analysing the role of stakeholders, the use of information or understanding the conflicts between different activities and jurisdiction of the governments involved.

Contact person: Jan van Tatenhove

Entrepreneurial Marine Protected Areas (EMPAs)

Can the private sector start and manage marine protected areas? As the rate of private involvement in marine conservation increases this is becoming a question many governments and NGOs are asking. We are looking for students to research case studies around the world on this new phenomenon and explore the ways in which private actors are taking the lead in so called 'EMPAs'. Are these durable alternatives to state-based management? What consequences do they hold for other resource users? These questions and more need further research.

Contact person: Simon Bush

lagging behind. A number of existing long-term management plans are based on the MSY principle. Since 2010 the Commission bases its proposals for annual TACs and quotas on scientific advice and on achieving MSY by 2015. The fishing industry in Europe has proven that it is possible to move to MSY, and has already achieved it for 11 stocks, namely sole in the Skagerrak, Kattegat and Baltic Sea, in the western Channel, in the Celtic Sea; North Sea haddock, Rockall haddock; herring in the North Sea, the west of Scotland and the Celtic Sea, megrims off Spain and Portugal and North Sea Nephrops. All of these stocks are today fished sustainably with increased landings and incomes for the fishermen and the coastal communities. Furthermore for a number of other stocks we are on a good way towards MSY 2015. The thesis can address how this principle of MSY is being operationalized in fisheries management in Europe.

Contact person: Luc van Hoof

The interplay of formal and informal politics in integrated marine policy

Characteristic for European governance is the interplay of formal and informal policy making. Besides the formal intergovernmental and supranational arenas, EU policy making takes place in different transnational informal arenas. Aim of this topic is to understand and analyse informal policy making in the marine policy domain. What are the result of negotiations in working groups, committees and epistemic communities for the development of EU integrated marine policy? Contact person: Jan van Tatenhove, Judith van Leeuwen

EU integrated marine policy: the tension between different maritime sectors and member states

To realize integrated maritime policy an integration of different policies on different levels is needed. However, there is a tension between maritime activities such as fisheries, oil-and gas production, shipping, tourism, nature conservation and recreation. These activities are also regulated at different institutional and governmental levels. This topic examines the enabling and constraining factors for realizing integrated maritime policy given competing maritime activities and different institutional settings. Contact person: Jan van Tatenhove

coasts and waterways of the region. In response international NGOs and companies have developed standards to govern the environmental and social impacts of their production. As these standards formalized in certification schemes such as the Aquaculture Stewardship Council (ASC), Naturland, and GlobalGAP (to name but a few) producers in SE Asia are struggling to comply and maintain access to international markets. We are therefore interested in recruiting students who have wish to research the implications of new social and environmental governance arrangements around aquaculture in Vietnam, Indonesia, Malaysia and Thailand. Contact person: Simon Bush

Marine Spatial Planning for the European seas

In its Blue paper the European Commission proposes an Integrated Maritime Policy for the European Union. A more collaborative and integrated approach is needed to deal on the one hand with the increasing competition for marine space and the cumulative impact of human activities on marine ecosystems, and on the other hand, to overcome the inefficiencies, incoherencies and conflicts of use caused by fragmented decision-making in maritime affairs. Integrated Maritime Policy requires a governance framework that applies the integrated approach at every level as well as horizontal and cross-cutting policy tools, such as maritime spatial planning. Maritime Spatial Planning (MSP) is "a process of analyzing and allocating parts of the three-dimensional spaces to specific uses, to achieve ecological, economic and social objectives that are usually specified through the political process; the MSP process usually results in a comprehensive plan or vision for a marine region". In cooperation with member states the EU is developing marine special plans for the North Sea, the Baltic Seas, the Black Sea and the Mediterranean. The aim of this topic is to study the development of marine spatial planning for the different regional seas.

Contact person: Jan van Tatenhove, Judith van Leeuwen

Stakeholder participation in integrated marine governance

Marine governance is the sharing of policy making competencies in a system of negotiation between nested governmental institutions at several levels (international, (supra)national, regional and local) on the one hand and state actors, market parties and civil society organizations on the other in order to govern activities at sea and their consequences. The development of different forms of integrated marine governance, such as marine spatial planning, integrated management of marine resources or integrated coastal zone and ocean management require new forms of participation. In general participation is the involvement of actors, such as citizens or non-governmental organizations, in policy making. The aim of this theme is to study innovative forms of governance in integrated marine governance.

Contact person: Jan van Tatenhove , Judith van Leeuwen

The Reform of the EU Common Fisheries Policy

The Commission has started a review of the Common Fisheries Policy to make it more efficient in ensuring the economic viability of the European fleets, conserving fish stocks, integrating with the Maritime Policy and providing good quality food to consumers. More and more the CFP has to deal with other domains of policy, such as integrated maritime policy and environmental policy (the Marine Strategy Framework Directive). This research topic focuses on the reform of the EU CFP: What will be the content of fisheries policy for the years to come? How is participation of stakeholders organized and how does the CFP relate to other marine policy domains?

Contact person: Jan van Tatenhove , Luc van Hoof

The EU Marine Spatial Planning Directive

In March 2013 the EU presented its Directive on Marine Spatial Planning. Maritime spatial planning (MSP) is about planning when and where human activities take place at sea. It is a transparent and comprehensive process based on stakeholder involvement. Its aim is to draw up plans which identify the most efficient and sustainable current and future use of maritime space. Next to addressing MSP the directive is also aimed at Integrated Coastal Zone management. Several issues related to this directive can be subject of research. Among these are questions such as: How is the Directive on MSP and ICZM related to the Commission's Europe

2020 strategy and Blue Growth initiative? The Ecosystem approach and MSP: who to organise what where? The Common Fisheries Policy, Natura2000 and Marine Spatial planning

Contact person: Luc van Hoof

Europe and Blue Growth

According to the European Commission, to make it through the crisis, Europe needs the contribution of all sectors of its economy. In this context, the marine and maritime sectors – the 'blue economy' – have an important role to play in the overall road to Europe's economic recovery. Marine and maritime activities, which provide work for 5.4 million people and account for a gross value added (GVA) of just under €500 billion per year, have a great potential and could make a major contribution to the objectives of the Europe 2020 strategy for smart, sustainable and inclusive growth. The Blue Growth initiative aims at highlighting economic opportunities in the blue economy, identifying sectors with the highest growth prospects and exploring further measures that need to be taken to support Member States to realise fully this potential. Central question we can address in the thesis is how sustainable is the proposed blue growth agenda.

Contact person: Luc van Hoof

Managing fisheries at MSY

In population ecology and economics, maximum sustainable yield or MSY is theoretically, the largest yield (or catch) that can be taken from a species' stock over an indefinite period. Fundamental to the notion of sustainable harvest, the concept of MSY aims to maintain the population size at the point of maximum growth rate by harvesting the individuals that would normally be added to the population, allowing the population to continue to be productive indefinitely. Member States (MS) and the EU subscribed to the MSY objective almost thirty years ago in the 1982 UN Convention on the Law of the Seas. They then reiterated it in the 1995 UN Fish Stock Agreement, in 2002 in the Johannesburg Declaration and finally in 2010 in Nagoya. Important international partners, such as the United States and Australia, have already moved in this direction and the EU is