IASC Regional Conference (Europe) 2016
Bern, Switzerland

Commons in a “Glocal” World:
GLOBAL CONNECTIONS AND LOCAL RESPONSES
10–13 May, 2016
Venue: University of Bern, Main Building

Program

Supported by
Institutes of History, Centre for Global Studies and Interdisciplinary Centre for Gender Studies
University of Bern, The Institute for Ecology and Action Anthropology, Switzerland

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IASC Regional Conference Bern

The Hosts and Main Organizers

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Panel Series

Series A: Features and Effects of Global (e.g. European) Investments on Commons in the World

Series B: Collective Action, the Commons, and Sustainability: What is the Role of Bottom-up Participatory Resource Governance (“Constitutionality”) in Switzerland and other European Political Systems in Common-Resource Governance?

Series C: The Commons in the Context of International Law, Human Rights, Trade and Investment Policies, and their Relation with the Triple Crisis of Financial, Environmental, and Humanitarian Processes

Participant List:

199
The topic: Commons in a “glocal” World: Global Connections and Local Responses.

Much research on the commons deals with one of two topics: Either with the interaction between local participatory governance and the development of institutions for commons management, or the issue of global change that is related to the increasingly globalized expansion of capitalist modes of production, consumption, and societal reproduction. The conference aims to bridge the two, investigating how global players such as multinational companies and organizations affect the commons worldwide and how they relate to responses emerging from within the commons in a global-local (“glocal”) world. Our focus is on inter-and transdisciplinary dialogue among representatives of academic disciplines (e.g. geography, social anthropology, history, development studies, economics, political science, and law) and non-academic actors (e.g. from business, policy, and civil society).

Relevance of the venue: Bern is an ideal location for this topic. It is the capital of Switzerland, a country whose policies are developed within a strongly decentralized system that includes participatory politics from the village level to that of the national Parliament. Its long tradition of decentralized governance also extends to mainly alpine commons (i.e. pastures, forests, wildlife, lakes, and rivers) and other common-pool resources (CPRs). Switzerland’s importance for the debate on the commons is illustrated by Elinor Ostrom’s reference to Robert Netting’s work on the pasture, water, and forestry commons in Törbel in the Swiss Alps.

In addition, Switzerland is one of the world’s leading financial marketplaces, and hosts the headquarters of large multinational companies in mining and agro-business that represent global players at critical glocal interfaces concerning e.g. the global land rush, mining, oil and gas commodity extraction, and commodity trading. Switzerland is also home to the United Nations and many international conservation organizations (e.g. IUCN and WWF), and a hub for international treaties and legal affairs. Switzerland is therefore one of the prime examples of local participation in resource management while at the same time being a centre for globalized capitalism and its norms and values. This is an interesting paradox that relates to the conference theme of Commons in the “Glocal” World: Global Connections and local responses.
The Hosts and Main Organizers

Institute of Social Anthropology
Founded in 1966 in the historical city centre of Bern as a small ethnological seminar the Institute of Social Anthropology has developed into one of the largest institutes in the German-speaking regions, with four full professors, one associate professor and many lecturers. It now accommodates a total of around 350 students. The institute offers a BA study programme as well as a general Master and a specialised master on Anthropology of Transnationalism and the State (ATS). It participates in the international Master’s Programme CREOLE and participates in the Swiss Graduate School in Social Anthropology. Research is carried out on topical and politically relevant subjects such as climate change, land grabbing, common property, human rights and national borders, precarious work, transnational production, the global social movement of people and the role of the new media in creating cultural identity, as well as into traditional areas such as gift-giving, family relationships, religious practices and ecology.

Centre for Development and Environment
CDE is an interdisciplinary research centre of the University of Bern. Its overarching goal is to produce and share knowledge for sustainable development in cooperation with partners in the global North and South. CDE conducts research to develop innovative concepts and solutions for the sustainable use of land and water resources. It also offers a range of services for planners and decision-makers that are closely linked to research. One of CDE’s central concerns is to foster dialogue between science and society while contributing to global debates on sustainability and development. In line with the University’s mandate to promote sustainable development, CDE offers various courses in sustainable development.

Institute of Geography/Department of Integrative Geography (DIG)
Founded in 1886, the Institute comprises Human Geography, Physical Geography, and Integrative Geography and conducts research on all aspects of geography. The Institute offers a Bachelor and a Master program and contributes to several other study programs. DIG is a special branch of the Institute focussing on Human and Integrative Geography and dealing with sustainable development and urban and regional planning.

Further co-organizers and supporters from the University are:
World Trade Institute, Institute of History, Centre for Global Studies. From outside the University we received support from the Institute for Ecology and Action Anthropology (infoe CH), Burgerstiftung Bern, Swiss Network for International Studies (SNIS), the Swiss Society of African Studies (SSAS) and from the Swiss Academy of the Social Sciences and the Humanities (SAGW)
The International Association for the Study of the Commons

The International Association for the Study of the Commons (IASC), founded in 1989 as The International Association for the Study of Common Property (IASCP), is the leading professional association dedicated to the commons. The IASC is devoted to bringing together multi-disciplinary researchers, practitioners and policymakers for the purpose of improving governance and management, advancing understanding, and creating sustainable solutions for commons, common-pool resources, or any other form of shared resource.

IASC’s goals are:

- to encourage exchange of knowledge among diverse disciplines, areas, and resource types
- to foster mutual exchange of scholarship and practical experience
- to promote appropriate institutional design

In order to attain these goals, the IASC organizes (among other things) regional, thematic, and biennial global conferences. Forthcoming conferences already scheduled are the 3rd Thematic IASC-Conference on Knowledge Commons (Paris, 20-22 October 2016) and the XVI Biennial Conference (Utrecht, 10-14 July 2017, see www.iasc2017.org). Also, the IASC issues the peer-reviewed, open-access academic journal International Journal (www.thecommonsjournal.org) of the Commons and the quarterly Commons Digest (http://www.iasc-commons.org/commons-digest). Next to this, the IASC issues a regular newsletter. Not yet a member? Look at https://membership-iasc-commons.org for more info.

"Chästeilet" is a tradition in the Swiss Alps in which alpine chees is distributed among the commonsers. ©KEYSTONE/Lukas Lehmann
The Organizers:

Main organizer is Prof. Dr. Tobias Haller (Institute of Social Anthropology). He holds an extraordinary professorship in social anthropology and is co-director of the Institute of Social Anthropology at the University of Bern. He is specialised in economic, ecological and political anthropology. His research focuses on common pool resource governance and institutional change. Theoretically, he combined and further developed a new institutionalism and political ecology perspective. He did fieldwork in Cameroon on agricultural change and in Zambia on the management of the commons in river floodplains. He has coordinated comparative research projects on the commons in Africa and has published on African Floodplain areas (Disputing the Floodplains 2010, with a foreword by Elinor Ostrom). Another research interest concerns the failure of participatory management in protected areas and its impact on the commons. In his recent work he focuses on issues of bottom-up institution building in the global South and in Switzerland. He is interested in contexts in which local people develop a sense of ownership of the institution crafting process (constitutionality), indicating an alternative to the failures of participatory management. Furthermore, he conducts and supervises research on “land grabbing” and the consequences on the commoners from a gender perspective. This includes also activities of transnational companies in the oil and mining business and how these affect the commons.

CO-Organizer is Prof. Dr. Stephan Rist (CDE). He studied Agricultural Sciences at the Federal Institute of Technology in Switzerland (ETH Zurich), and holds a PhD in Rural Sociology of the Technical University of Munich in Germany. He is associate professor in human geography working in the Department of Integrative Geography (DIG) belonging to the Institute of Geography and the Centre for Development and Environment (CDE). Since 2011 he is head of CDE’s cluster on “Governance of Land and Natural Resources”. His main fields of research are related to agrarian transitions in South America, Africa, and Switzerland, institutional change in resource governance in view of social learning processes, transdisciplinarity and inter-epistemological dialogue. With regards to commons Stephan Rist’s main research revolves around the development of the above-mentioned concept of constitutionality (together with Tobias Haller), the role of commons in agrarian transitions in Bolivia, Peru, and other countries in the global south due to land concentration and land reforms.

Bern Conference Team (Anna von Sury, Elisabeth Schubiger, Fabian Käser, Franziska Marfurt, Samuel Weissman)
Venue

The IASC Regional European Conference is hosted by the University of Bern. All conference events will be held at the Main Building, Hallerstrasse and vonRoll Area (for the location of the venues, see map p.8). Information on location and schedule of all events can be found in the program. All meeting rooms are within walking distance and close to the old town of Bern and the main railway station.

The University of Bern was established in 1838 and hosts 160 institutes at 8 faculties. It is not a specialized university, but what in Switzerland is known as a “Full University”, which is nonetheless among the worldwide leading universities on many topics including climate change and sustainability. It offers study and research facilities for 15,500 Students and 1,100 faculty members. The University of Bern offers top quality across the board: it enjoys special recognition in leading-edge disciplines and is reputed for the excellent quality of its teaching. It also offers a delightful setting and a campus environment intimately linked to the social, economic, and political life of the city. It is one of the larger Swiss universities, but it retains a personal feel and has a warm and friendly atmosphere. Teaching and research is conducted on an interdisciplinary basis, as in the four National Centres of Competence in Research (NCCR) housed in Bern: “RNA & Disease” (ribonucleic acid molecules), “PlanetS” (planetary systems), “International Trade Regulation” (international trade) and “TransCure” (membrane biology). The University also hosted the NCCR North-South from which the Centre for Development and Environment (CDE), one of the co-organizers, emerged. The university is actively involved in a wide range of European and worldwide research projects, notably in the field of space research. With its central geographic location and attractive programmes, it draws students from all of Switzerland’s language communities and from abroad.

No bottled water but reusable cups

In the panels, at coffee breaks and receptions we do not offer privatized bottled water. In collaboration with Refiller and Blue Communities we provide tap water and reusable cups. Please always return the cups so that we can reuse them.

In an average cafeteria, 24’000 single-use cups are thrown out every year. This is why Refiller is offering reusable cups for hot and cold drinks in company cantines, mensas and takeaways. After use, the cups are collected, washed and reused - which is 12 times more sustainable than plastic single-use cups.

For further information see: www.refiller.ch

Blue Communities were initiated by the Council of Canadians as a local and global movement for water security and justice. Since 2011, the initiative has attracted a growing number of communities in Canada. In 2013, thanks to the international networking of Maude Barlow, it successfully made the jump to Switzerland when the city of Bern and the University of Bern declared their commitments as Blue Communities. Brazil also adopted the movement in 2014 under the name Cambuquira. In this way, Blue Communities have emerged worldwide as self-declared, collective actions on behalf of local resource governance, which simultaneously take account of international interrelations and responsibilities. Together, Blue Communities represent a growing global initiative to defend water as the foundation of life, a protected human right, and a common resource that must not fall prey to trends of privatization and commodization.

For further information see: http://www.bluecommunity.ch/
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- Doris Wastl-Walter (Vice Rector, University of Bern)
- Virginia Richter (Dean of Faculty of Humanities)
- Stephan Rist (Centre for Development and Environment, University of Bern)
- Tine De Moor (International Association for the Study of the Commons)
Keynotes

Social Causality of our Common Climate Crisis
Jesse Ribot
Department of Geography & Geographic Information Sciences, University of Illinois

Tuesday 10 May 2016 18.00-19.00
Main Building, Audimax 110

Adaptation is forward looking. But we need to look back at the causes of precarity to move toward security. Causal analysis of vulnerability aims to identify the roots of crises so that transformative solutions might be found. Yet root-cause analysis is absent from most climate response assessments. Framings for climate-change risk analysis often locate causality in hazards while attributing some causal weight to proximate social variables such as poverty or lack of capacity. They rarely ask why capacity is lacking, assets are inadequate or social protections are absent or fail. The same is true with the debate on the commons. This talk frames vulnerability and security as matters of access to assets, including common-pool resources, and social protections. Assets and social protections each have their own context-contingent causal chains. A key recursive element in those causal chains is the ability – means and powers – of vulnerable people to influence the political economy that shapes their assets and social protections. This is the element of representation. This talk will explore some of the causes of vulnerability among farmers in Eastern Senegal. It will frame a social causal analysis of vulnerability related to climate change as a matter of access to the commons and markets from which people build assets and access to and influence over governments that provide social protections.

Biography: Jesse Ribot is a Professor of Geography at the University of Illinois with appointments in the Department of Anthropology, School of Natural Resources and Environmental Studies (NRES), the Unit for Criticism and Interpretive Theory, Beckman Institute for Advanced Science and Technology, Global Studies, Women and Gender in Global Perspective (WGGP), and Institute for Sustainability, Energy and the Environment (iSEE), and is on the faculty of the College of Humanities and Development Studies of China Agricultural University in Beijing. He is also a co-director and co-founder of the Initiative on Climate Adaptation Research and Understanding through the Social Sciences (ICARUS).
Shared Ownership as Key Issue of Swiss History. Common Pool Resources, Common Property Institutions and their Impact on the Political Culture of Switzerland from the Beginnings to our Days
Daniel Schläppi
Institute of History, University of Bern

Wednesday 11 May 2016 19.00-19.30
Main Building, Aula 210

Swiss history is characterized by a strong tradition and culture of commoning from the beginnings to the present day. Starting with the middle ages a complex network of alliances developed among the Swiss cantons who worked together for the purpose of reciprocal peacekeeping. The allies supported each other militarily and agreed on specific conciliation proceedings for conflict mediation. Over the centuries, the fragile structure grew together. Although each of the 13 cantons was an independent state, they started to conquer subject territories together in 1415, which were managed as common property even in spite of confessional schism between protestant and catholic cantons.

During the 17th and 18th centuries communities took more and more charge of functions of the state at their own expense (such as market regulation, fire brigade, maintenance of infrastructure, residence registration office and welfare institutions). In consequence important administrative tasks and “public services” were based on collective resources and municipalities and corporations settled their agendas independently. The Swiss model can be seen as a perfect example of “Co-Production of Statehood”, as a “Commons-State”, rather built bottom-up than top down.

The Swiss political system remained stable for centuries due to various forms of redistribution for the benefit of the full-fledged members of the communities. Some very old institutions have even survived into the 21st century.

Biography: Dr. Daniel Schläppi is Senior Scientist at the University of Bern. He focuses on Swiss History before 1800 and has been working on the commons in Switzerland from a historic perspective. In addition, he had research projects on Swiss Corporate Institutions and Swiss Diplomacy in the past. His recent research on common property, collective resources and the political culture of Switzerland before 1800 was funded by the Swiss National Science Foundation.
Governance of Local Commons (Local Microcosms) – between Self-Regulation, Public Policies and General Institutions

Peter Knoepfel
Faculty of Law, Criminal Justice and Public Administration, University of Lausanne

Wednesday 11 May 2016 19.45-20.15
Main Building, Aula 210

We define as local microcosms sub-, intra- or supra-communal territories characterized by outstanding resources, a strong position of land-owners, a strong self-regulation component performed by their own local regulatory arrangements (LRA) claiming for being different from the “rest of the world” as we see this in Western Europe. Their boundaries separate “Ins” from “Outs”. Such microcosms are part of the west European political system but are also increasingly emerging as a reaction against globalization and liberalization worldwide; their recognition is also recommended as an important contribution to sustainable development (local agenda).

In order to sustainably manage “their” “commons” the concerned actors build local regulatory arrangements (LRA) which, according to the presented Institutional resource regime (IRR) approach, have to perform key regulatory functions such as the assurance of legitimation, the control of the boundaries, the definition of the jurisdiction of microcosm’s actors, monitoring/sanctioning, fixing the rules of the games and the integration of the microcosms into the overall political system.

An effective realization of these functions has to be embedded in a broader political system as the west European case shows. It might otherwise enter into conflict with overall principles of the political systems within which these microcosms are situated, such as democracy and the sovereignty of parliaments, the rule of law, federalism or human rights, specific public policies or nationally defined institutional regimes for the concerned resources.

By means three different types of resources (natural, intellectual and cultural) the contribution illustrates a critical lecture of such microcosms and their risks enabling the Conference participants to discuss various regulatory approaches of such increasingly emerging local communities in the light of such potential conflicts.

Biography: Prof. Peter Knoepfel holds a Ph. D. in public law, Honorary Professor of Law of the Taras Shevchenko University of Kiev, ordinary professor in public policy analysis and sustainable development at the Swiss Graduate School of Public Administration (IDHEAP) (1982-2014), Director of the IDHEAP (1994-2002), head of the Public Policy and Sustainability Chair (until 2014), and formerly research director at the Social Science Research Centre Berlin, is the author and editor of numerous academic books, articles and contributions in collective works in German, French and English on the theory and practice of public policy analysis – in particular environment policy and sustainable development, cultural policy and natural resources policy.
From Common Pool Resources via Commons to Commoning: A Conceptual Journey
Silke Helfrich
Commons Strategies Group

Friday 13 May 2016 8.45-9.15
Main Building, Audimax 110

In many European countries, the public debate on Commons is gaining momentum. Whether in Italy or France, in Croatia or Germany. It takes place beyond universities: in social movements, networks, NGOs and even in political parties. It refers to an enormous variety of resources and realms, confusing to many.

In search of conceptual anchoring, such debates are loosely linked to scientific frameworks and findings, yet, they are also related to people's experiences and developed further accordingly. Silke Helfrich invites you to her intellectual/conceptual journey, sharing the evolvement of key-notions like common pool resources/common goods, Commons and finally commoning as they occur in international debates. This journey led her to an understanding of the Commons as an attitude and a mind-set that both frames and enables a commons based and commons creating society.

Biography: Silke Helfrich (Jena, Germany) has studied romance languages and pedagogy at the Karl-Marx-University in Leipzig. Since mid of the 1990s she is active in the field of development politics. From 1996 to 1998 she was head of Heinrich Böll Foundation Thuringia and from 1999 to 2007 head of the regional office of Heinrich Böll Foundation in San Salvador and Mexico City for Mexico/Central America/Cuba, focusing on globalisation, gender and human rights. Since 2007 she works as independent author, activist and scholar, with a variety of international and domestic partners. Helfrich is the editor and co-author of several books on the Commons, among them: Who Owns the World? The Rediscovery of the Commons, Munich 2009 and The Wealth of the Commons beyond Market and State, Amherst/MA, 2012) and most recently with David Bollier and Heinrich-Böll-Foundation The Patterns of Commoning, Amherst/MA). She is cofounder of Commons Strategies Group and the Commons-Institute e.V. and the primary author of the German speaking CommonsBlog.
Our Water Commons, Protecting Water for People and Nature Forever
Maude Barlow
The Council of Canadians

Friday 13 May 2016 9.15-9.45
Main Building, Audimax 110

In a world running out of accessible clean water, a mighty contest has grown up. On one side are those who say that the market is the answer to the water crisis and who would put the world’s water supplies on the open market to be bought, sold and traded like running shoes and cars. On the other side are those who say the only way to protect water, water justice and ecosystems is to declare water a human right, a public trust and a commons to be managed by elected governments on behalf of the people. Maude Barlow has been at the forefront of this contest, advocating that all water be protected in law as a commons and will share her experiences and insights as we collectively face the greatest human and ecological crisis our time.

Biography: Maude Barlow is a Canadian author. She is the National Chairperson of the Council of Canadians, a citizens’ advocacy organization with members and chapters across Canada. She is also the co-founder of the Blue Planet Project, which works internationally for the human right to water. Maude chairs the board of Washington-based Food & Water Watch, is a founding member of the San Francisco–based International Forum on Globalization, and a Councillor with the Hamburg-based World Future Council. In 2008/2009, she served as Senior Advisor on Water to the 63rd President of the United Nations General Assembly. She has authored and co-authored 16 books.
To date, the social science and humanities literature on the Anthropocene has been fairly devoid of considerations of justice. The argument here is that the injustice of the Anthropocene will come with two kinds of disruptions to communities – and community relationships with environment and their commons. On the one hand, the "slow violence" of environmental deterioration, as Nixon has called it, will continue to inequitably undermine the cultures, food, land, and health of vulnerable communities. Simultaneously, these disruptions will also come quickly, in singular events like Katrina, wildfires, and heatwaves. The Anthropocene will disrupt both human and human/nonhuman connections and communities, undermining a key need and demand of environmental justice – attachments to community and to place. I conclude with suggestions for, and examples of, just adaptation and governance that take attachment seriously.

Biography: David Schlosberg is Professor of Environmental Politics in the Department of Government and International Relations at the University of Sydney, and is known internationally for his work in environmental politics, environmental movements, and political theory - in particular the intersection of the three with his work on environmental justice. Most recently, he has co-authored Climate-Challenged Society (Oxford 2013) with John Dryzek of ANU and Richard Norgaard of UC Berkeley; the same team edited The Oxford Handbook of Climate Change and Society (Oxford 2011). His current research includes work on climate justice - in particular justice in adaptation strategies and policies, and the question of human obligations of justice to the nonhuman realm.
Millions of people worldwide depend on commons – the land, fisheries and forests which they use collectively as commons. Commons are essential to culture, identity and well-being. As a source of food and income, they are an important safety-net, especially for the most marginalized and vulnerable people. However, tenure rights to commons are often jeopardized by an increasing demand and competition for natural resources alongside processes of privatization, encroachment and commercial large-scale land transfers. Securing collective tenure rights to commons for local rights holders such as smallholders, pastoralists, fishing communities, indigenous peoples and the most vulnerable and marginalized people is hence a critical component in today’s transformation towards a sustainable world.

The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (Tenure Guidelines) provide a historic opportunity to recognize and protect tenure rights to commons. They are the first internationally agreed soft law instrument for the responsible and human rights-based governance of tenure of land, fisheries and forests. Adopted in 2012 by the UN Committee on World Food Security (CFS), they were developed through an unprecedented inclusive and participatory multi-stakeholder process including governments, civil society, the private sector and academia. Since then these different actors are involved in making the Tenure Guidelines a reality on the ground. To increase the uptake of the Tenure Guidelines in national contexts, FAO provides, for example, Technical Guides, such as the Technical Guide on Governing Tenure Rights to Commons which was prepared by the IASS through a multi-stakeholder approach.

So, how to make best use of the UN Tenure Guidelines to secure tenure rights to commons? What strategies can be employed and what experiences have been made so far? What are the states’ responsibilities at home and abroad? What can be learned from advocacy for human rights and community land rights? And, what role for inclusive multi-stakeholder approaches for implementation?

This interactive policy forum invites actors from different perspectives and the audience to discuss these questions, exchange experiences and identify strategies.
Practitioners’ Labs

At each IASC-Conference, the IASC organizes Practitioners Labs open to all those who want to share their knowledge and expertise on specific issues and questions practitioners are confronted with. Please feel free to join,

Recognising and supporting the Commons and ICCAs in Europe – better awareness, stronger action and vastly improved policies, starting from the EU CAP

Tuesday 10 May 2016 19.15-21.15, Main Building, Kuppelraum

Grazia Borrini-Feyerabend (Indigenous Peoples’ and Community Conserved Territories and Areas Consortium)

The ICCA Consortium is an international association dedicated to promoting the appropriate recognition of and support to ICCAs (territories and areas conserved by indigenous peoples and local communities) in the regional, national and global arena. The Consortium works by promoting and connecting ICCA-related initiatives at local, regional, national, and international level. Members of the organization are grassroots and customary and/or formal non-profit organizations with involvement, experience, and commitment in governing and/or supporting ICCAs at any level.

At this practitioners’ lab, the focus will be on the recognition and support of European ICCAs and how to endorse and promote this. Questions that will be discussed are:

- As many of the problems and issues faced by the communities governing the commons in Europe are at European scale (e.g. European Union policies), should the communities governing the commons in Europe work together to face these issues jointly?
- How best could such communities in Europe network and cooperate to improve their governance and management of the commons and ensure their survival at European scale?
- How best could we support such “action-oriented networking” among European communities and their allies?
- How can such networking go beyond information exchange and empower the communities governing the commons in Europe to achieve positive policy changes for the common good?
- How this networking could strengthen their rights and provide them with appropriate technical and research support?

The outcomes of this discussion will be used to feed the Consortium Policy Brief on ICCAs and the EU policy the ICCA Consortium is currently developing, expected to be finalized and issued in Summer or Fall 2016.
Open Spaces Society

Friday 13 May 2016 12.00-13.00, Main Building, Room 304
Brown Bag Meeting, please bring your own lunch

Kate Ashbrook (Open Spaces Society)

Based in Henley-on-Thames, Oxfordshire, the Open Spaces Society (OSS) campaigns for common land, town and village greens, open spaces and public paths, helping and advising people on the law and practice to defend these places by lobbying with the government and local authorities, and by writing articles and generating other means of publicity.

The OSS aims to:
- enable everyone to enjoy benefits of commons, greens, other open spaces and public paths within easy reach of their homes, workplaces and leisure destination;
- protect existing commons, greens, and other open spaces;
- create and protect new greens, open spaces, and public rights of way;
- public access to all commons, greens, and other open spaces and public paths, for quiet enjoyment;
- make public bodies fully aware of their obligations and duties to enforce legislation.

By organizing this practitioners’ lab, the OSS wants to learn:
- of differences and similarities between practitioner groups in other nations;
- of possible global synergy;
- of experiences of other organizations.

Cooperacy (cancelled)

Friday 13 May 2016 13.00-15.00, Main Building, Room 120

Alessandro Merletti De Palo (Cooperacy)

The Cooperacy project proposes a definition of cooperation based on a multidisciplinary constructs model, being compared on international indicators PLS analysis, social representation, Facebook groups real and relational benefits analysis, game theory dual benefit analysis and subsequent mathematical model theorization.

Our complete research project includes dedicated experimentation with small groups in parallel with real life analysis of human interactions in companies, sharing cities, sharing economy vs. sharing business comparison, open space technology meetings, enjoyable communication (Non Violent Communication, Principled Negotiation and Theory of Desires), participated budgeting, lean manufacturing, blockchain technology, false cooperative companies definition methodologies.

Questions that will be discussed at this meeting will be:
• How to bring balance between Equivalence, Trust, Care, Transparency, Freedom, Understanding and give Diversity its right space?
• What are the conditions that let commons and the commons theory to be applied on our daily lives and our economic system?

SAFE - Solidarity Action and Fund for the Defenders of the Commons and ICCAs

Friday 13 May 2016 13.00-15.00, Hallerstrasse 6, Room 205

Grazia Borrini-Feyerabend (Indigenous Peoples’ and Community Conserved Territories and Areas Consortium)

The ICCA Consortium is an international association dedicated to promoting the appropriate recognition of and support to ICCAs (territories and areas conserved by indigenous peoples and local communities) in the regional, national and global arena. The Consortium works by promoting and connecting ICCA-related initiatives at local, regional, national, and international level. Members of the organization are grassroots and customary and/or formal non-profit organizations with involvement, experience, and commitment in governing and/or supporting ICCAs at any level.

At this practitioners’ lab, the focus will be on the phenomenon of victimisation of individuals and communities who engage on the front line defending their commons and ICCAs, often at dear cost for themselves and their families. An introduction will be given on the process by which the idea of SAFE has emerged and developed, and its current standing will be discussed. While forms of “victimisation” in Europe will be reviewed, the event would stress ways to develop close solidarity and mutual learning among European and non-European communities.

Questions that will be discussed at this practitioners’ lab are:
• Are the commons and ICCAs under attack or threats?
• If yes: where so, when, how, by whom?
• Is anyone resisting and defending them?
• What can (and sometimes does) happen to such defenders?
• What can be done to support the defenders of the commons and ICCAs?
• Would that work also across continents and cultures?
Side Event

An action network dedicated to the appropriate recognition and support to the Commons and ICCAs in Europe

Friday 13 May 2016 15.30-17.30, Hallerstrasse 6, Room 205

Grazia Borrini-Feyerabend (Indigenous Peoples’ and Community Conserved Territories and Areas Consortium)

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The issues ICCAs are dealing with involve issues of information, communication, “translation” of issues for decision makers, respect to Aarhus Convention, participatory evaluation of policies, participatory research agendas and commitment/engagement of research institutions about the practical value of the commons and ICCAs, and ways for them to respond adequately to the opportunities and threats they face.

At this side meeting, the following questions will be discussed:

- Do the commons in Europe contribute to social, economic and environmental goals?
- Do we know at which extent? Is this role recognized?
- Who governs them?
- What main threats and opportunities (e.g. recognition as ICCAs) do they face?
- Are EU policies (e.g. the CAP) supportive or detrimental for the commons and ICCAs?
- How can we influence the EU policies to support rather than undermine the commons and ICCAs?

Switzerland is a hub for headquarters of transnational companies involved in mining, production, and trading of commodities, which affect the commons directly and indirectly. Mopani Copper Mines, Zambia (see Panel #A03). Photo © Meinrad Schade
Book Launch

The Open Cut: Mining, Transnational Corporations and Local Populations

Tuesday 10 May 2016 19.15-21.15, Main Building, Room 028

Thomas Niederberger (Institute for Social Anthropology, University of Bern)
Madlen Kobi (Völkerkunde Museum, University of Zürich)
Abdoulmohamime Khamed Attayoub (Maire de la Commune rurale d’Akoubounou, République du Niger)

The rapid expansion of the mineral and metal mining sector in the past decade was accompanied by an increase in social conflicts. What are the impacts of large-scale mining operations? What are the strategies used by transnational corporations to gain access to underground resources and legitimize their activities? And how do local and indigenous communities confronted with mining react to, negotiate with and resist these activities? This book covers 13 case studies of copper, gold, uranium and other mining operations, situated in Latin America, Africa, Asia, Australia and Switzerland. With an extensive introduction to the subject and a systematic comparison across mining operations in different phases of development and social contexts, it serves as a primer and reference book for activists, students and researchers alike.

Documentary Launch

Common Sense: A User’s Manual

Friday 13 May 2016 12.00-13.00, Main Building, Room 120
Brown Bag Meeting, please bring your own lunch!

Raymond Taudin Chabot (IDtv)

Common Sense: A User’s Manual is an interactive documentary that looks at the historic concept of the Commons used in present day communities for solving problems and sharing resources. It consists of carefully produced showcases featuring commons used by farmers, in the city and in the digital realm. In line with a contemporary way of consuming digital media the viewer can browse and find additional in depth information provided by experts. These consist of filmed interviews, audio recordings and articles. The project will be introduced by screening a selection of clips followed by a Q & A by the maker and Prof. Tine De Moor.
IASC Membership Meeting

Wednesday 11 May 2016 13.00-14.00, Main Building, Room 331
Brown Bag Meeting, please bring your own lunch!

Tine De Moor (IASC)
Annelies Zoomers (International Development Studies, Utrecht University)

The IASC welcomes all participants (members and non-members!) to the membership meeting at the Bern Conference. Tine De Moor, President of the IASC, will inform you about recent developments regarding the IASC and its members, but also about the plans for the near future.

At this meeting, Tine De Moor and Annelies Zoomers will also present the results of a worldwide inventory of Training and Education on Commons.

Graduate Meeting

Thursday 12 May 19.00-21.00, Hallerstrasse 6, Room 203

René van Weeren (IASC)

The Graduate meeting is the perfect opportunity for graduate students to meet their fellow students and exchange their ideas, knowledge, and expertise in an informal setting. The meeting will start with a short introduction, delivered by one of the experts in the field of commons issues and will have ample room for discussion. Enjoy the company of your peers next to some drinks and snacks.

Communal Alpine Pastures in Sumvitg, Canton of Grisons, Switzerland (see Panel # B16). Photo © Gabriela Landolt
Dinner & Concert

Dinner

Friday 13 May 2016 19.00-20.30, VonRoll Fabrikstrasse 8, Fabrikhalle 12

For the Dinner on Friday evening, we have organized some traditional local food: a typical Swiss Raclette. The original Swiss melted cheese will be served at our buffet with potatoes, salad and some side dishes. As dessert we will be serving a chocolate fondue with fruits and coffee. Alternatives for those who do not like cheese is organized.

Concert

Friday 13 May 2016 20.30-22.00, VonRoll Fabrikstrasse 8, Fabrikhalle 12

- Max Lässer
- Noumoucounda
- Thaïs Diarra

For the final ceremony of the conference we will enjoy „glocal“ music. One of the most famous Swiss guitar players, Max Lässer, will show us his versions of Swiss traditional music performed with local instruments but with new interpretations of this music that will then interact with music from Senegal in the second part of the concert: The cora-player Noumoucounda – who has been performing with Senegal’s most famous singer Youssou N’Dour - will „glocaly“ interact with Max Lässer in order to meet traditional Griot-music with Swiss sounds. The last part of the concert encompasses traditional and modern African music performed by Noumoucounda and the singer-songwriter Thaïs Diarra (Mali/Switzerland).

Max Lässer: www.maxlaesser.com
Noumoucounda: www.noumou.com
Thaïs Diarra: www.thaisdiarra.bandcamp.com
Field Trips

Visit to Törbel - In the footsteps of Robert Netting
Date 12. May 2016, 8.45 am – 6.00 pm
Place Törbel
Organization Tobias Haller (Institute of Socialanthropology, University of Bern), Urs Juon (Gemeindepräsident Törbel), IASC Regional Conference
Language English (German)

The Excursion Topic
A visit to Törbel in the Valais region, exploring Robert Netting’s work on commons that inspired Elinor Ostrom’s work. We will visit the site of Netting’s research on the demography of a Swiss community and the management of the Alpine cultural landscape, which showed the interrelatedness of common pool resources (pastures, meadows, fields, and forests) and property regimes (common and private property). We will visit the village pasture area as well as the old irrigation systems, and learn how people from Törbel faced institutional changes in the past (demographic, agricultural markets and policies, environmental changes such as climate change).

Program
Introduction by the municipal about the village of Törbel, followed by a tour around the village. Lunch in Restaurant Weisshorn with products from the region in Törbel. Drive to the Moosalp where we get inputs by the excursion leaders and local actors about the management of the alpine landscape.

Themes to be covered:
- General introduction into the region
- Irrigation systems in the Valais: history, diversity, governance
- Area planning in Törbel: challenges and perspectives
- Local landscape ecology and landscape change

Link: http://www.toerbel.ch
Water and landscape governance in Naters (canton of Valais) and the surrounding region

Date 12. May 2016, 7.45 am – 6.00 pm
Place Naters
Organization Karina Liechti (Senior Research Scientist, University of Bern), Beat Ruppen (Director of the WHS Management Centre), IASC Regional Conference (Europe)
Language English (German)

The Excursion Topic
Over the centuries, various institutions for governing common pool resources such as water, pastures, and landscapes have been crafted and continuously adapted in the Naters region. Even nowadays, they play an important role in resource management and in the maintenance of an ecologically diverse landscape. Additionally, the commune is part of the Swiss Alps Jungfrau-Aletsch UNESCO World Heritage Site (WHS) region and has committed itself to preserve the diversity and uniqueness of the WHS for future generations. The excursion will give an insight into the large share of commons managed through diverse local institutions. A focus will be put on irrigation cooperatives, their long history and current challenges, and the processes of establishing and governing a WHS.

Program
Hike from Blatten to Naters (around 2.5 hours) with inputs by the excursion leaders and local actors. Lunch (picnic) with products from the region.

Themes to be covered:
- General introduction into the region
- The Swiss Alps Jungfrau-Aletsch UNESCO World Heritage Site: history, structure, projects
- Irrigation systems in the Valais: history, diversity, governance
- Water channel governance in Naters: history, today’s practices and infrastructures, challenges and strategies
- Area planning in Naters: challenges and perspectives
- Drinking water cooperatives
- Transhumance
- Local landscape ecology and landscape change

Link
- http://www.naters.ch/ (in German)
- http://www.jungfraualetsch.ch/en.html (in German and English)
Commons in Bernese Oberland – Naturpark Gantrisch

Date
12. May 2016, 8.30 am – 6.00 pm

Place
Naturpark Gantrisch

Organization
Christine Scheidegger (Projektleitung Parkwissen/Wasserwelten), Philipp Mösch (Wasserbauverbände Obere Gürbe), Heinrich Wildberger (Präsident Wasserbauverbände, Untere Gürbe und Müsche), Philipp Mösch (Bereichsleiter Waldwirtschaft, Kantonales Amt für Wald, Waldabteilung Voralpen), Margrit und Paul Haldemann (Hof Gürbmättli Wattenwil), IASC Regional Conference (Europe)

Language
English (German)

The Excursion Topic
A visit to the forest commons in the Bernese Oberland, where we will visit Gantrisch Nature Park to learn about participatory community management approaches. This is a unique example of a locally-driven and state-ratified example of bottom-up institution building for resource management. The Swiss Government issues the possibility for regions to gather, organize, and submit a request to bear the Nature Park (“Naturpark”) label. At the Gantrisch Nature Park, groups related to forestry, agriculture, tourism, and marketing (especially also women’s groups) successfully organized themselves to apply for (and receive) the label. Despite their heterogeneous interests, the various groups developed rules, and the region as a whole now benefits from the label, which does not protect nature per se but an old cultural landscape. On this excursion, we will learn about the relation of Swiss, Bernese, and local forestry laws and how different regimes of property intersect for the sustainable use of these forests. Further we will learn about hydraulic engineering at the river Gürbe.

Program
Hike along Oberer Gürbe (around 1h) with inputs by the excursion leaders and local actors. Lunch with products from the region at a local farm includes the visit of the farm where they have a local noodles production and do chicken and cattle farming.

Themes to be covered:
- General introduction into the region
- The Gantrisch Nature Reserve
- Forest Management
- Water management and hydraulic engineering at the Gürbe
- Farmers in the Parc
- Local landscape ecology and landscape change

Link: http://www.gantrisch.ch/
SoliTerre- Collective action for a sustainability bridge between rural and urban areas in Bern

Date 12. May 2016, 8.15 am – 14 pm
Place Bern, Iffwil
Organization Biohof Zaugg, Claudia Schreiber (Soli Terre), IASC Regional Conference (Europe)
Language English (German)

The Excursion Topic
We will visit a farm, which produces products for the local market and for SoliTerre. The basic idea of SoliTerre is simple: Farmers and consumers form an association together. Based on annual contracts, consumers subscribe to receive a weekly basket of food produced by farmers. Production is coordinated not through anonymous markets, but rather through collective action based on face-to-face contact. Prices are negotiated in line with a shared definition of “fairness” between producers and consumers. Thanks to frequent visits to farms, and occasional voluntary work on farms, mutual trust and understanding are continually cultivated. The main overarching goal is to live according to the principle of food sovereignty, based on democratic, self-organized collective action that integrates social and ecological dimensions of sustainable development in a self-determined way. Goal of the excursion is further to experience how farmers produce on biological principles on small-scale farms in Switzerland.

Program
Visit to a farm 20 minutes from the capital city of Bern, which produces for the local market and participates in the project Soliterre. Excursion participants can experience how a Bio-labelled small-scale farm produces different vegetables, and how it does animal farming. Further Claudia Schreiber from Soli Terre gives us insights into their project. Lunch with products from the region will be provided at the farm.

Themes to be covered
- Tour on the Farm
- Introduction into the Project SoliTerre

Link
- http://www.soliterre.ch/
- http://www.biohofzaugg.ch/
A visit to the Burgergemeinde Bern and its Forest

Date: 12. May 2016, 9.00 am

Place: Bern

Organization: Henriette von Wattenwyl (Burgergemeindeschreiberin), Stefan Flückiger (Forstmeister), IASC Regional Conference (Europe)

Language: English (German)

The Excursion Topic
A visit to help participants understand the governance of common belonging to the Burgergemeinde of Bern. The Burgergemeinde of Bern is a cantonally acknowledged community whose membership depends on lineage or adoption. The Burgergemeinde of Bern owns real estates as well as forest- and farmland in and around the city of Bern. It engages in diverse social, cultural, scientific and ecological programs that benefit the public.

Program
- Presentation in the “Burgerspital” about the Burgergemeinde and their projects (with a focus on the new Berner GenerationenHaus).
- Lunch in the Restaurant toi et moi (in the Burgerspital)
- Visit to the forest of the Burgergemeinde to experience how the forest in the city and as a common property is managed.

Link: www.bgbern.ch
Swiss Agricultural Policy – from local to global

Date 12. May 2016, 9.00 am - 17.30 pm
Place Bern/Emmental
Organization Bundesamt für Landwirtschaft (BLW), IASC Regional Conference (Europe)
Language English (German)

The Excursion Topic

Links between processes on a global level and actors acting on a local level in the agricultural sector are numerous. The most popular example certainly is climate change, which is caused by global greenhouse gas emissions and has a huge local impact. In Switzerland, for example, we notice an accumulation of exceptionally dry summers leading to an increased demand for irrigation. In addition, changing climate in combination with increased mobility leads to a wider spread of plant diseases and insects, which creates an increasing challenge for the agricultural production systems in Switzerland. Even more common are global and local linkages in the markets for agricultural products. Most markets for agricultural products in Switzerland are sensitive to changes on their global counterpart. This concerns also commonly organized structures like the traditional Swiss summer pastures or cooperative cheese dairies.

Program

The excursion has the goal to show the participants how Swiss agricultural policy deals with these global challenges. It starts with a global overview over Swiss agricultural policy, its goals and measures taken. Then the program will focus on food security, an important topic in national agricultural policy that has as close link to global development. Furthermore, the implication of global developments on Swiss value chains for agricultural products will be discussed. In discussing these topics we will lay a special focus on the discussion of commonly organized structures. Experts from the Federal Office for Agriculture will provide an input that is followed by a discussion.

To see the implication of global and policy developments on the ground, we will visit an artisanal cheese dairy and a dairy farm in the Emmental in the afternoon.

Link
www.bwl.admin.ch
www.huepfenboden.ch
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The sustainability of food systems is an emerging field of research. Studies analyse how actors, institutions, knowledge, and power relations regulate access to natural resources and their use, as well as how natural resources are transformed into food flows, from input supply to production, consumption, and beyond. The outcomes of food systems are assessed against the five principles of food sustainability: food security, realization of the right to food, social-ecological resilience, avoidance of harmful environmental impacts, and reduction of poverty and inequality.

Changes in relative prices in the global North have affected the management of commons in the global South since colonial times. Today, agro industrial food systems, often spanning two or more continents, link consumers in the global North with producers in the global South. These transcontinental systems have additional strong impacts on commons in the global South. Local commons are part of local food systems, which in turn are crucial for people living in the South. Case studies have shown that the penetration of transcontinental agro industrial food systems into a local context lead to changes in relative prices that affect the management of common-pool resources. Such processes can be described as a new form of economic enclosure expressed in obliging people to resort to the use of local commons to cope with shortcomings of agro industrial food systems for their livelihoods. Some studies have also revealed positive developments: In the Mount Kenya region, for example, agro industrial horticultural companies facilitated the development of new forms of common resource management (e.g. water for irrigation) to prevent negative impacts of conflicts among local actors and between the companies and local actors for accessing commons in a transformed setting.

These cases indicate that food system impacts on local commons create a need - and sometimes opportunities - for renegotiating how these commons should be governed. To achieve food sustainability, renegotiations must involve local, state, private-sector, and civil-society actors, including food producers, processing companies, retailers, and consumers.

For this panel we seek contributions that help to better understand the links between food systems, food sustainability, and common-pool resources. Examples may range widely and might focus on issues such as water governance in a setting where agro industrial food production coexists with local or traditional forms of food production; air pollution rules regarding emissions from food production, processing, and transporting (e.g. in the context of carbon trade schemes); or the effects of food consumption patterns in the global North (e.g. meat, sugar, palm oil) on forest use in the global South. We welcome both conceptual and empirical contributions that link the commons to food systems and look at relations between the global North and South.
Extensive quinoa production in Southern Bolivia: How are producers associations shaping the governance of natural resources?

Maurice Tschopp (Centre for Development and Environment, University of Bern)

Background:
Quinoa is an ancient Andean crop that has been cultivated in Bolivia for millennia. Due to spectacular increase in prices since 2000, cultivated areas of quinoa have increased tremendously in the region of study (Southern Province of Potosi, Bolivia). In a region where land is communally owned (and hence here considered as a common good), the dramatic increase in production created new tensions over communal norms and contributed to increased conflicts over demarcation and user rights. In addition, fallow and pasture lands were massively converted to quinoa production, which seems to accelerate the degradation of land resources in the region.

Research objectives, results and discussion:
In this paper, I will assess the role of quinoa producers associations in addressing degradation of communal land. These associations are key actors as they control the majority of the regional quinoa ex-port market. This paper will provide insights into the issues of norms developed by producers associations (size of land cultivated, periods of fallow land, biological production, minimum amount of live-stock per ha) and their enforcement mechanisms.

In particular, I will examine how these norms were adapted and negotiated with other stakeholders such as the Bolivian state, local communities and international buyers. Hence, this study will examine the relationships between stakeholders from different levels, and how the (re)structuring of power affected the institutional framework that has been in place long before the quinoa boom. I argue that interaction with these multiple stakeholders resulted in stricter rules for quinoa production and may have contributed to consolidate local institutions. Rule enforcement, however, is problematic as producers associations face important challenges. The number of their staff is limited and capacity might be insufficient to control a large territory.

In the analysis, associations’ norms will be evaluated on the basis of Elinor Ostrom’s eight “design principles” that improve the effectiveness of common property regime. Particular attention will be directed on rule development and exclusionary practices in the course this process, especially regarding the inclusion of women, in the light of the environmental justice framework.

Methods:
The study uses a mixed-method approach, both quantitative and qualitative. It builds on a survey conducted in November 2015, which investigated, among other themes, conflict over natural resources and agricultural practices. In addition, extensive context information was collected in January and October 2015 through qualitative methods such as focus group discussions and in-depth interviews with key actors in the region. A last round of interviews is scheduled for March 2015.

Acknowledgement:
This study is part of the FATE project (Feminization, Agrarian Transition and rural Employment), a six year research project jointly funded by the Swiss Development Co-operation and the Swiss National Science Foundation (www.fate.unibe.ch). This project investigates the impact of export-led agriculture on rural employment and capabilities of women and men in four countries (Bolivia, Rwanda, Laos and Nepal)
Food as a global common-pool resource – potential impacts to the achievement of food security globally and the realisation of the right to food for all
Adriana Bessa (Geneva Academy of International Humanitarian Law and Human Rights, University of Geneva)
Nicholas Orago (Department of Public Law, University of Nairobi)

Food is fundamental to human survival and well-being, but increasingly, many people in the world are unable to access adequate food to meet their basic nutritional needs and to enable them undertake their daily activities. Data indicates that globally about 795 million people do not have access to adequate food to lead healthy and active lives, which translates to about 1 in 9 people in the world. The majority of these people live in developing countries, with Asia and Sub-Saharan Africa bearing the burden of hunger, with data indicating that at least 1 in 4 people is perennially undernourished.

In the context of this huge hunger challenge, it has been acknowledged that international hunger is not a result of inadequate production of food, as research indicates that food production has outpaced demand globally. It is, however, a challenge of access, as the majority of the undernourished are unable to access the available food because of entrenched poverty and inequality on the one hand, and the problem of privatisation and commoditisation of food on the other hand that has seen international food systems being monopolised by a few for-profit agri-business corporations. The twin challenges of destitution and commoditisation of food have conspired to out-price the poor from access to the available food stocks. How can this challenge be dealt with effectively to ensure that the hungry have access to food at the household level and that food security and the right to food is realised at the national and international level?

This paper discusses a possible solution to the conundrum of hunger globally can be the categorisation of food as a global common-pool resource, similar to resources such as the atmosphere, oceans and forests. It will delve on the following difficult questions - What are the global common-pool resources? Does food have the necessary characteristics to be categorised as a global common-pool resource? What are the expected legal challenges?

Food System Impacts on Community Water Projects in the Mount Kenya Region
Fabian Käser (Institute of Social Anthropology, University of Bern)

After independence, colonial ranches in the semi-arid region North-West of Mount Kenya were allocated mainly by immigrating Kikuyu settlers who cultivate crops mainly for local as well as national consumption. In the 1990s commercial horticultural and floricultural companies started to grow food for a global agro-industrial food system linking Kenyan producers with European consumers.

In the semi-arid region, both, the settlers and the commercial producers faced serious water constraints. To cope with water scarcity and emerging conflicts, they joined forces and formed water pro-jects for the construction and maintenance of water supply systems. Companies supported these pro-jects mainly to avoid conflicts with neighbouring communities, accusing them of drawing off their water. Together with the government and aid agencies, the companies took over an important role for the funding and implementation of these water supply projects. Commonly developed rules, often formally committed to paper, prescribe the mandatory contribution and allowed benefit of the different members of such water projects.
According to the literature, this seems to be a successful model of participatory bottom up initiatives for a common management of a sparse resource, even including commercial companies. These institutions are also well nested in regional and national legislations through so-called Water Resource User Associations and the New Water Act of 2002. With the involvement of the commercial horticultural companies, these water projects also illustrate an interesting and positive interlink of the agro-industrial and the local to national food systems in this region.

However, by a closer look on the ground at which interest groups are actually benefiting from these water supplies, analysis of selected water projects show that not all members are benefiting equally. Some groups have advantageous positions to access water even in times of scarcity while others are still not connected to the supply system. This can be explained through physical characteristics of the system (e.g. proximity to intakes), but negotiation processes, including bargaining power positions, also influence the distribution of the piped water. While the companies’ supply is relatively secure, some groups of smallholders do not benefit from the project at all and again accuse the companies of drawing off too much water. A further problem is lack of funding. Members who do currently not receive water or expect limited access in times of scarcity – because others have better abilities to take water – are not willing to invest in the construction and maintenance of the pipe system. This reduces available funds to improve the distribution system for the sake of all members and in turn increases the number of members with limited access.

Some of the actors who do not benefit from the current management of the resource see the failure in the bad management of these common projects and call for private companies as water supply provider.

The presentation will address questions of impacts of the different food systems on the management of the common water supply from local actors’ perspectives scrutinized in a three months exploratory anthropological field research.

Global investment and local livelihoods: the impact of foreign investment on local food security in Sub-Saharan Africa
Bram van Helvoirt & Guus van Westen (International Development Studies, Utrecht University, The Netherlands)

Globalization blurs traditional dividing lines between territorially-based institutions, actors, and activities – for instance when foreign business interests invest in agricultural activities in developing countries. In line with neoclassical principles such cross-border investment flows may bring positive effects, in terms of production and productivity increases, jobs and income generation, technological upgrading and the creation of market links through insertion in value chains. At the same time, experiences have shown the risks involved in such linking of different realities. Power asymmetries tend to benefit large business interests and local elites, at the expense of smallholders and vulnerable groups including women, pastoralists and others whose rights are little documented: these may face loss of access to – hitherto common - natural resources such as land and water on which their livelihoods depend.

Foreign agrofood investment in developing countries, private as well as spurred by government policies, aims to contribute to global food security, but may also affect local food security in the recipient country. How exactly local livelihoods and food security is influenced is not so clear. Direct land acquisition by outsiders is somewhat hyped in the 'land grab debate'. But other ways also result in a loss of local control and access to key natural resources for locals. The North-South nexus brought along by foreign investments in local food systems is
not a single (linear) connection between foreign companies and local producers within the narrow setting of a value chain. Rather, as we argue in this paper, this nexus should be regarded as a multifaceted set of interactions, consisting of different intermediaries and impact pathways that affect various elements and users of local common-pool resources. In order to explore the complexity of the North-South nexus, this paper will attempt to conceptualize this nexus along three impact pathways: (1) livelihood and food security effects of value chain insertion by local smallholders; (2) changing local natural resource access and use (affecting local people not directly involved in production); and (3) the functioning of local (urban) food markets (affecting urban consumers in terms of food availability and accessibility).

The paper will draw empirical evidence from European agribusiness investments in Sub-Saharan Africa and their local development and food security impacts, based on a selection of recent studies undertaken by the International Development Studies group of Utrecht University.
Undermining the commons: transnational corporations, mining, and impact on commons governance

Wednesday 11 May 2016, 11.00-13.00, Main Building, Room 304

Convenor:
Thomas Niederberger (Institute of Social Anthropology, University of Bern)

In the context of a “super-cycle” of high commodity prices over the last two decades, the fast expansion of extractive industries was accompanied by increasing social conflicts. Switzerland and European based Transnational Corporations and commodity traders play a crucial role in expanding the “frontier of extraction” especially in regions of the “Global South”, where the capital-intensive, large-scale mining industry often collides with local institutions of common-pool management – especially, regarding land, forest, and most of all, water. Mining crucially contributes to the transformation of commons to private and state property, because it gives priority to state-regulated, privatized access to underground mineral resources over the livelihood-base of local communities.

Mining corporations adopted a pioneering role in Corporate Social Responsibility (CSR). CSR proofs to be useful for immunizing corporations against critique (Kirsch 2014) and as a tool for corporate security (Welker 2014); it thereby supports the imposition of “developmentalist” value-systems, as defined by corporate actors, over the political and socio-cultural sphere through legitimizing discourses that create what miners call the “social license to operate” (Coumans 2011). As an “anti-politics machine” (Ferguson 2006), CSR-related consultation and compensation programs nurture expectations among local populations to participate in “development”, rather than to resist against negative socio-environmental impacts of mining. This exacerbates social divisions and results in complex resistance/negotiation-dynamics, with different sectors taking conflicting positions during a mine’s life-cycle. However, the turn to CSR has also improved the power leverage of local people under certain conditions. Through strategic coalition-building – especially if it is underlined by common values and conceptions of well-being and “the good life” – mining projects can be challenged. Conflicts at specific mines can thus become “hot-spots” for contestations, discourses and practices that relate to other places and local movements against large-scale industrial projects, in different stages of development (in the sense of a “politics of time and space”, Kirsch 2014). They may thus be “politics machines”, i.e., a breeding ground for the constitution of shared values that counter mainstream notions of “development”, which again may be the precondition for the bottom-up emergence of new institutions (in the sense of “constitutionality”, see Haller/Acciaioli/Rist 2015) – in this case, regarding the ownership, use and management of mineral resources, and the possibility to conceive mineral resources as “glocal commons”.

The panel calls for presentations that explore aspects of this thematic: from the analysis of local transformations that come with global trends in the mining and commodity trading sector, to the dynamics of local resistance/negotiation and their feedbacks on the global scale, to the potential of linking these scales, not only for more equitable and sustainable extraction, but also exploring linkages to the demand-side (i.e., consumption, recycling etc.).
Paper Contributors:

**Stakeholder analysis in coupled social-ecological systems: a tool for exploring the role of institutions in conflict and cooperation? Empirical evidence from the mining sector and the commons in Kyrgyzstan**
Beril Ocakli (Humboldt University, Berlin)

This paper sets out to explore global connections and local responses with regard to the commons by the example of the mining sector in Kyrgyzstan. Subsoil resource-rich developing countries share the common goal of using the mining sector as an economic catalyst for development. Kyrgyzstan is in this sense not an exception to the rule: the non-renewable natural resource endowment offers a high potential for economic growth. This potential remains, however, under-realised due to two interrelated phenomena: the lack of socially-inclusive management of the resource revenues and the local responses in the form of persisting opposition to the mining projects. This study focuses on the second phenomenon: local response in the form of conflicts brought about by multiple-demands on land and water by gold mining companies and users of common-pool resources. Water and land play an existential importance especially for subsistence in rural areas but they are also part and parcel of mining.

Stakeholder analysis can be used as a methodology for understanding problems, especially in natural resource management, where no single actor or organisation is in charge, but many are involved, affected and/or affecting or have some partial responsibility to act. Against this background, the aim of this paper is to test stakeholder analysis as a tool for identifying (i) action arenas where stakeholders (“actors”) are confronted in action situations that lead to conflicts amongst them and (ii) the effect of the institutional framework on prevailing local responses to the gold mining projects in Kyrgyzstan. First, the paper introduces the unit of analysis as the coupled social-ecological system (SES) at the interface of the minerals sector and renewable natural resources in Kyrgyzstan. Ostrom’s SES approach is extended to account for the interaction between the non-renewable mineral resources and the common-pool resources and users thereof. As a next step, stakeholder analysis as a methodology is presented, where for the purposes of the paper a generic definition of “stakeholder” is established. Following this, the results of thirty in-depth semi-structured interviews, carried out with key stakeholders in Kyrgyzstan, are illustrated and discussed. To this end, the stakeholders are analysed, categorised and visualised.

*Keywords: stakeholder analysis, coupled social-ecological systems, institutions, conflict and cooperation, gold mining, common-pool resources*

**Mining industry and Local Peacebuilding in War-Torn States: the Ity mining and the local governance dynamic in Côte d’Ivoire, West Africa**
Dit Fatogoma Djane Adou (Swiss Peace, Bern)

The presentation aims to show how international institutions and the regulatory transformations underway in the mining sector restructure the local governance in a country...
which is exiting out of a civil war with major consequences on the West African sub region. Through the case study of Ity mining in the West of Côte d’Ivoire, the research analyses the tangible results of the relations between global and local institutions within the sector of mining and their impacts on peacebuilding and local development. It aims to do so both at the national level and the rural margins in the areas of productions; whilst addressing the challenges for building long term peace and a sustainable socioeconomic development process in a war-torn country. This research project will also highlight the role of, and inter-relations between, international institutions, state agencies and local actors in the development and peacebuilding process in Côte d’Ivoire.

In fact, Côte d’Ivoire has been experiencing decades of violent political conflict, with more than 3000 deaths and massive human rights violations following the presidential election of 2010 (National Commission of Inquiry 2012). At the same time, the country is also engaged in developing its mining sector with large-scale investments and many ongoing exploration permits throughout the country.

In this regard, the mining sector in Côte d’Ivoire is subject to a diverse set of ongoing restructuration which involve international organizations. Among others, the Extractive Industries Transparency Initiative (EITI), the Kimberley Process and the Property Rights and Artisanal Diamond Development (PRAD) are restructuring the economic space and the processes of conflict transformation at a national and local level. Following the EITI’s process, a new mining code has been established at the end of 2014. Among others, it provides for the creation of local level institutions such as the Local Development Committees (CLD), to act as institutional link between the mining industries and the affected populations. At the same time however, the mining boom also leads to the spread of artisanal gold mining, in relationship with a massive arrival of new migrants which mainly come from the surrounding countries of Burkina Faso, Guinea, Mali, Ghana, Liberia, and Sierra Leone. At the local level, this dynamic also contributes to reshaping the economy, whilst the emergence of community tensions raises challenges in terms of local governance.

**Keywords:** Mining Industry; local; peacebuilding; Côte d’Ivoire

**“The Open Cut”: Mining, Transnational Corporations and the Commons**

Thomas Niederberger (Institute of Social Anthropology, University of Bern)

This paper presents some selected results from the comparison of 13 case studies of mining conflicts carried out by students and researchers of Social Anthropology and Geography at the University of Bern between 2011 and 2015 (see volume “The Open Cut: Mining, Transnational Corporations and Local Populations” by Niederberger et al. 2016); furthermore, it explores the relevance of such conflicts regarding some of the debates about the commons.

Mining typically creates new and exacerbates existing social divisions. Different sectors of the local population are thereby taking divergent positions in complex resistance/negotiation-dynamics, at times, switching suddenly from one to the other; this can change over time, along the life-cycle of a mine (exploration – planning – construction – operation – expansion – closure), reflecting i.e. pre-existing social tensions along the lines of gender, age-groups, elites
and patronage relationships, indigenous vs. settler groups, etc., but also negative experiences and deceived expectations. At the same time, we find corporate actors increasingly engaged in institution-building and partial take-over of state responsibilities, such as the provision of public services, infrastructure and “security”, in a kind of “corporate state-building”; this has important implications for the relationship between local population groups and the state. The comparison develops scenarios of such shifting constellations; such scenarios may be useful to place individual cases in a larger perspective and in relation to other cases, and to perceive mining (and other socio-environmental) conflicts as a field of interlinked local struggles, created by strategic alliance building, knowledge exchange and the “spill-over” of negative experience from old to new mining areas. While the impacts of mining and related social divisions are certainly detrimental to common-pool institutions, I argue that under certain conditions, mining conflicts may trigger debates that can contribute to the emergence of new, “glocal”, institutional arrangements regarding the use of mineral resources.

Keywords: Anthropology of Mining, mining conflicts, Transnational Corporations, CSR, institutional change

The End of the Holocene in the Sahara: Undermining the Commons in Times of the “Anthropocene”
Saskia Walentowitz (Institute of Social Anthropology, University of Bern)

The once green Sahara is the place of one of the greatest feats of human ecology and settlement of our planet. Despite dramatic climate change some 5000 years ago, this vast region has been continuously inhabited by a diversity of human cultures. Neolithic people shaped complex cultural landscapes, as depicted in numerous cave paintings, rock carvings, and artefacts throughout the Saharan desert. Saharans proved capable to maintain fragile, inhospitable ecosystems thanks to the creation of symbiotic pastoral and agricultural economies and worldviews in which mobility is the key to access vital resources such as water and pasture. This dynamic equilibrium has been disrupted by the advent of colonisation and ensuing politics of plundering. Uranium mining in Northern Niger plays a crucial part in these exponential processes of undermining Saharan life worlds. More than hundred years of human and environmental rights violations continue to be ignored in the name of the modernist developmental spell. Stigmatized as “unruly nomads” yesterday, and “Islamic terrorists” today, the Tuareg, who have been inhabiting the uranium-rich plains in the Air region for centuries, have continually been portrayed as anti-modern icons of Mankind’s distant past.

In times of unprecedented climate change in which the Western industrial nations have transformed human beings into a geological force, it becomes more and more apparent that this Modern story can no longer be told. The aim of this paper is to discuss the implications of the advent of the “Anthropocene” for the description and analysis of practices that undermine the commons in the globalized South. Extraction economies based on the convention according to which an autonomous, exploitable nature legitimizes “politics without Earth”, are transforming the Sahara into a social desert; indeed, a barren space of deadly traffic and transit, thus bringing an ill-fated end to 10,000 years of Holocene settlement. Like climate change, this
event cannot be grasped in terms of “local” responses to “glocal” entanglements without reinforcing the very assumptions that led to the situation in the first place. How can anthropologists, instead, make sense of pastoralist ecologies and Tuareg conceptions of the non-domesticated (esuf) in radioactive mining areas that are connected to the Cold War? How can we describe the uranium tragedy in Northern Niger so that it becomes a problem of French citizens who understand themselves as Earth-bound human beings? How can we decolonize our tool cases along the development frontiers among those who have been colonized, while acknowledging that the end of modernization, like denuclearization, needs time of transition? In this paper, I will try to reframe the case of uranium mining in Niger in the light of some recent approaches to the “Anthropocene” in anthropology and the environmental humanities.

Keywords: Anthropocene, Niger, Pastoralism, Uranium, Sahara

Minerals and Forests: People’s Resistance and Corporate’s Persistence in India
Purabi Bose (Sadguru Foundation, Gujarat)

This preliminary study is part of my documentary film research on traditional forest rights of marginal groups, including indigenous peoples and women. In India there is growing conflict between the government, extractive industries and local communities regarding the management of forests and their resources. The framework of ‘sustainable development’ allows the dilution of what is claimed, and by whom. India’s growing unrest in mineral rich pockets such as Odisha (Niyamgiri) and Tamil Nadu (Nilgiris) throws light on how local communities resist the development strategy of extractive industries. The attempt to ‘undo’ the recognition of community forest rights is becoming an emerging trend of state and central government departments.

In brief, this study highlights a few key findings: The first is that persistence of corporate strategy, ‘integrating’ the sustainable development dimension, is changing the understanding of collective governance of vulnerable ‘tribal’ or indigenous groups. Next, it questions the role of ‘legitimate’ institutions in recognizing the rights given to local communities. The claims by local communities further strengthen the ‘identity and power relations’ of the state to promote ‘development’ through decentralized dialogues. Overall, this paper makes an attempt to draw a conceptual understanding of ‘development’ in context of mining in forest areas inhabited by vulnerable population groups.
# A04 - Energy and the Commons

Wednesday 11 May 2016, 14.00-16.00, Main Building, Room 304

Convenor:

Christian Rohr (Institute of History, University of Bern)

Paper Contributors:

A common pool resource framework for comparing community renewable energy projects
Melf-Hinrich Ehlers (The James Hutton Institute)

I develop a framework for the analysis of institutional evolution of the diverse development and business models of renewable energy generation with a focus at "community renewable energy". Community renewables projects can share attributes of commons and common pool resources, as they can draw on local resources and infrastructure and can impact on local environments, such as landscape in the case of wind energy, while local or larger-scale communities can benefit from the energy generated. However, community renewable energy continues to be an ill-defined concept, despite a long tradition in certain regions such as in Denmark and Northern Germany and great expectations in countries such as Germany, the UK and Italy. Increased social acceptance, mitigation of environmental conflicts and improved development of local communities are usually seen as the main benefits of such arrangements, when they encourage local ownership. Property rights and governance arrangements are decisive for qualifying as a community energy project. However, differences to "non-community" projects are not entirely clear, as other models also offer benefits to "local communities", while ownership may be shared between large institutional investors, local residents, absentee owners and municipalities for example. These questions can be decisive for governments and banks wishing to support community renewables. More generally, the de facto organisational set-ups can theoretically direct investments in renewable energy infrastructure and determine who benefits from increased deployment. This way they would influence the future of energy provision.

The guiding research questions are how community renewable energy generation projects emerge, how they are organised and how they change over time. This implies a need to categorise community renewables projects and identify quantitative and qualitative change. I approach the questions of emergence from entrepreneurship perspectives (private, social and public) and the questions of organisation and change from institutional and evolutionary economic perspectives, with a particular focus on common pool resource theory. The analytical framework I develop is used in a systematic content analysis of published research on community renewables.
There is very limited research into the conditions for emergence of novel organisational models of community renewables, their evolution and implications for further deployment and governance of respective sectors. For example, external professional development and management companies can be involved in such projects, while some community renewables projects are merging and run subsidiaries, for example managing local grids. Other community projects fail and are bought by community and “non-community” companies. There are thus similarities to large utilities to which community renewables are often compared to more sustainable decentralised alternatives. Several criteria are identified, which determine the degree to which these renewable energy projects can be seen as commons and community enterprises. The criteria can also be used to track institutional evolution and compare projects in different localities in terms of ownership, conflict mitigation and policy dependency.

Individual and Collective Adoption of Photovoltaics in Italy and Austria: A comparison of Motivations, Values and Concepts of Human-Nature Relationships

Michale Braito (University of Natural Resources and Life Sciences, Vienna)
Marianne Penker (University of Natural Resources and Life Sciences, Vienna)

A transition to renewable energy production is expected to contribute to commons such as air quality or a stable climate. Therefore a variety of energy policies, among them financial incentives, support the diffusion of solar energy plants (photovoltaics). An emerging field of literature cautions policy makers that economic incentives may also promote self-enhancement values or anthropocentric relationships of humans with nature, which in turn support short-term thinking and reduces the awareness for bigger-than-self problems or the willingness for collective action.

In my PhD I compare households of different photovoltaic programs to understand their potentially diverging motives, values and relationships towards nature as well as the relevance of diverging renewable energy policies.

The study sites of Pustertal in Italy and Murtal in Austria are very similar in terms of socio-economic, biophysical and historical context. They were selected because of their contrasting photovoltaic policies: high financial support for individual adoption of photovoltaics in Pustertal (Province of Bolzano/South Tyrol, Italy) versus lower financial support for individual adoption, with supplementary support of citizen solar power plants in Murtal (federal state of Styria, Austria). I screened hundreds of articles and conducted 22 interviews with stakeholders and end-users to frame the research. Afterwards, I surveyed three different groups of households: (a) individual investors in photovoltaics, (b) participants of collective photovoltaic projects (only in Austria, as there were no citizen solar power plants in the Italian study site at the time of data collection), and (c) as a control group, households who did not become active for photovoltaics until data collection. I collected 580 questionnaires (response rate of almost 50%) with the Drop-off/Pick-up method, postal and electronic, to assess respondents motivations, values, and relationships towards nature.

Economic motives have a significant effect for individual or collective photovoltaic engagement. Not expected to be significant, but investors in privately owned photovoltaics are
strongly driven by the interest in technical innovation. Participants of citizen solar power plants have additional biospheric and altruistic motives. Missing financial resources, unavailable open space or roof areas were seen as barriers by the group of non-investors. Some demographic variables characterize “typical” individually acting citizens and contrast them with “typical” collectively acting citizens. Both groups hold quite similar values, but differ in their relationships towards nature. As correlations show a significant link between motivational factors and the relationships individuals have with nature, the research fosters a deeper understanding on specific motives and concepts of human nature relationships held by households acting individually and collectively for photovoltaics. I discuss possible implications of the results for the governance of commons, such as crowding-out effects or framing processes.

Renewable Energies between public and private goods – challenges and opportunities of Energy Transition in Germany
Andreas Roehring (Leibniz Institute of Research on Society and Space, Erkner)

Energy transition from fossil to renewable energies is a main topic to protect climate as a global public good. Given the ubiquity of renewable energy sources, especially solar radiation and wind as free goods, decentralisation is a key catchword of energy transition and often seen as synonymous with new opportunities for regional development. But the institutional change in the energy sector in Germany is characterised by contradictory regional impacts. The rapid development of renewable energies driven by economic incentives of the Renewable Energies Act (EEG) led in face of economically rational behaviour of large-scale investors to a considerable landscape change, deficits of economic participation and an increasing rivalry in land use, perceived as public “bads” of energy transition. The groups of stakeholder affected by and those actively involved in the development of renewable energies in a concrete region are often not identical.

At the local and regional level in Germany we can find in general two different strategies to deal with these challenges: to let things more or less slide and deal with the negative external effects or, alternatively, to use the opportunities offered by liberalisation for developing institutional arrangements, governance structures and collective action to create renewable energies as new regional commons. Both strategies will be illustrated with reference to two neighbouring regions: the Prignitz in the State of Brandenburg and the Wendland in the State of Niedersachsen.

In the case of Prignitz, a former East German Region, the large-scale agricultural landscape has been transformed mainly by external investors into an “energy landscape”. It is now characterised by large wind power plants, yet also by substantial biogas and photovoltaic power plants, whose energy production far exceeds its energy consumption. In the light of landscape change and an insufficient degree of economic participation, Prignitz’s stakeholders view their region mainly as an “installation landscape” for external investors, and tend to highlight the resulting conflicts as a result of negative external effects of energy transition. The regional actors of Wendland, a former West German Region historically shaped by anti-nuclear movements, pursue a strategy of collective action. They have constituted Wendland as a Bio-energy region and they aim to provide the region intentionally with 100% renewable
energies (100 % Renewable Energy Region). The landscape is characterised by smaller biogas plants corresponding to the smaller-scale agricultural structure. Bio-energy villages, local heating networks provided by farmers or flowering plant strips to compensate large maize fields are part of this strategy to create what can be seen as a new regional common.

Ecologie politique et transition énergétique en côte d’ivoire: déterminants sociaux du choix des énergies combustibles dans les boulangeries à Abidja
Berte Salimata (Université Félix Houphouet Boigny de Cocody)

La question des énergies renouvelables, la préservation des écosystèmes en lien avec les activités de subsistances en milieu urbain dans les pays en développement sont au cœur de la transition énergétique (COP 21, Dialogue 2015, etc.). En Côte d’Ivoire, la forêt connaît une perte de sa superficie à un rythme très accélétré passant de 16 millions d’hectares en 1960 à moins de 2 millions d’hectares en 2012 (Ministère des eaux et Forêts, 2013). Plusieurs facteurs sont mobilisés pour expliquer la délinquance du couvert forestier ivoirien. Parmi ceux-ci il y a l’abattage de bois à des fins de cuisson (Sodefor, 2013) qui représente 70 à 80% de la consommation totale d’énergie des ménages en Côte d’ivoire (Unccd, 2002).

L’utilisation du bois de chauffe et du charbon de bois dans les zones urbaines sans actions réflexives de son renouvellement est l’une des causes majeures de la dégradation avancée de la forêt (Sodefor 2013). Ces énergies ligneuses restent de loin les combustibles les plus utilisés avec plus de 600 000 tonnes consommées annuellement, dont 50% pour la ville d’Abidjan (Diakalia D., Tahoux T., 2008 ; Djezou 2009, Fao 2010; Plan National de l’Energie en Côte d’Ivoire, 2012). Parmi les catégories d’acteurs qui utilisent la biomasse ligneuse à Abidjan comme combustible, se trouvent les boulangeries qui ont accès à d’autres sources d’énergies combustibles. Ainsi le dénombrement des boulangeries, dans quatre communes de la ville d’Abidjan révèle que sur un total de 268 boulangeries modernes recensées, 145 soit 54,10% utilisent le bois de chauffe et les 123 soit 45,89% utilisent les autres sources d’énergie combustible.

Cette situation soulève le problème de rapport différencié aux choix des énergies combustibles dans les boulangeries à Abidjan, au détriment du cadre réglementaire relatif à la promotion des énergies alternatives mis en place par l’Etat.
L’étude tente d’expliquer les logiques sociales du choix des combustibles dans les boulangeries à Abidjan. Elle s’appuie sur des outils et méthodes de recherche qualitative (observations, entretiens). A l’aide de l’analyse de contenu thématique des données, elle a permis de mettre en évidence les différentes politiques de préservation du couvert forestier en Côte d’Ivoire, les représentations sur l’usage des combustibles, sur les priorités et valeurs qui influencent le jugement et le comportement des différents acteurs envers l’environnement.

Mots clés: énergies combustibles, environnement, boulangerie, Côte d’Ivoire
How to Build Collective Actions and Deal with the Tragedy of the Commons in Cirata Dam, West Java, Indonesia?

Aceng Hidayat (Bogor Agricultural University)
Andini Kusumawardhani (Bogor Agricultural University)

Cirata Dam was built in 1986 and finished in 1988. It began to be inundated and started operating in 1988. Cirata Dam has been built by damming up Citarum River whereas its main purpose is to be a hydropower electric generator (PLTA) meeting the electric needs in Java and Bali. PLTA Cirata is the biggest PLTA in Java and Bali. Therefore, it has a very strategic and urgent function. Building Cirata Dam has caused 32 villages to be flooded and thousands of people to be relocated. To assure the relocated people a livelihood, the Cirata Dam Management Authority (BPWC) has given them chances to develop fish culture businesses by applying a floating-cage fish culture method (KJA) in certain areas. In the beginning, BPWC only allowed them to apply for a KJA maximum of 2,000 units. In 2001, the number of KJAs reached 30,429 units. In response to the increase of KJA numbers, the Governor of West Java issued the Governor decree number 41/2002 to limit the KJA maximum number to only 12,000 units or approximately 40 hectares (1% of the total puddle) in 2002. However, the number of KJAs has grown unstoppably and in 2011 reached 53,031 units. According to recent data, now KJA numbers have reached more than 57,000 units. This condition has generated organic material sedimentation of fish feed residue and faeces. The rate of sedimentation in Cirata Dam has reached 4.38 tons per year. This organic material sedimentation has caused serious negative environmental impacts. Namely, decline of fish productivity, water pollution and decline of life time of the PLTA function. Results of research show that fish productivity has declined during the last 5 years and has caused a financial loss of Rp 4,219,702,954,280. The life time of the PLTA function has lowered from 80 years to 60 years with a total loss reaching Rp 11,812,036,184. What has been described is a significant case of tragedy of the commons.

We assumed that what happened at Cirata Dam stemmed from ineffective institutions. This study aims to analyse causal links between ToC and ineffective institutions; paradox of stakeholders’ high expectations to the Cirata Dam’s sustainability of ecological services on the one hand, and lack of their efforts to apply a sustainable dam-management, on the other; and how to develop an institutional arrangement that can lead and engage stakeholders to do ‘collective action’ by which Cirata Dam will be able to produce sustainable benefits as expected. In developing the new institutional arrangement, some European countries’ experiences in building collective action of dam-management that have similar issues with Cirata Dam will be referred.

Keywords: Tragedy of the commons, ineffective institutions, collective action, sustainable benefits
# A05 - The climate change dilemma: global and local scales in climate science

Wednesday 11 May 2016, 16.30-18.30, Main Building, Room 331

Convenors:

Dania Achermann (Centre for Science Studies, Aarhus University)
Matthias Heymann (Centre for Science Studies, Aarhus University)

This panel suggests treating climate as a common and explores the scientific and ideological causes of a crucial dilemma behind the failure of climate politics: the emergence of a predominance of global perspectives, conceptions and knowledge of climate, in short the globalization of climate knowledge, which does not translate into local knowledge, experience and political action. On the one hand, twentieth century climate science improved an understanding of global climate change tremendously. On the other hand, it focused on reductionist quantification and modelling, and an emphasis on large spatial and temporal scales. The panel offers a contribution to a better understanding of how scientific, technological and political interests pushed a globalizing agenda in climate science and produced a conceptual and discursive detachment of climate knowledge from human scales.

Climatology as conceived in the 19th century by Alexander von Humboldt and others focused on detailed local information. The human dimension – the support of human affairs – was at the core of it. In this conception climate was, first, associated with a specific geographical location, second, directly linked to human experience, and third, a holistic concept that included the investigation of the mutual interaction of climate and humans on the local scale. This conception retained priority until the mid-20th century, while at the same time a fundamental transformation from geographical to physical understanding, from local concern to global science was underway since the late 19th century and became hegemonic in the post-war era. With this transformation climate knowledge became detached from humans, knowledge-making from meaning-making, and global fact from local value. Climate science represented a powerful global player with a significant impact on ideologies and perceptions, and the tendency to alienate global understanding from local practice.

It is the purpose of the panel to invite scholars in history, geography, anthropology and other fields to investigate the increasing loss of the human scale and its impact on scientific and social perceptions and action. Sets of leading questions are:

1. How and why did an increasing focus on large spatial and temporal scales in climate research in the 20th century emerge, whereas perspectives on smaller scales, notably on the human scale were increasingly marginalized?

2. Which scientific, political and cultural interests and contexts proved instrumental in the push to larger scales? How did broader phenomena of economic, political, technological and cultural globalization inform the push towards global scale knowledge?

3. How did scientists and other global and local actors perceive and negotiate scales of knowledge and the gains and losses of an increasing predominance of climate knowledge on large spatial and temporal scales?
Answers to these questions are important to facilitate effective interfaces between local processes and global understanding.

Paper Contributors:

The Politics of Global and Local: Perspectives from the Tea Growing Community in North-east India
Sadaf Javed (Centre for Studies in Science Policy, Jawaharlal Nehru University)

Livelihood vulnerability linked to climate change has compelled people and communities in India to embrace a range of adaptation strategies. This paper intends to discuss the challenges faced by tea growers in the state of Assam with regard to their coping and adaptation strategies in dealing with recurring seasonal variability and extreme weather events. Tea or *Camellia Sinensis* is a large and extensive industry in Assam that spans a huge spectrum of economic and social differences from large plantation owners to small subsistence growers. This paper discusses the difference in perception of weather and climate among growers and how these two groups of growers read and react to them differently. Studying the implications of climate change hence, as I will argue, will require being attentive as much to mapping the implications of changing weather and rainfall patterns as it will also require us to understand how social and economic differences determine adaptation and coping strategies. This study while drawing upon my recent ethnographic field work — involving detailed interviews amongst different tea grower in Assam - will also discuss several government initiatives with regard to the Tea Industry. This paper will argue that the internal economic and social heterogeneity amongst tea growers - in terms of land ownership patterns and relative resource capacity - militates against any simple search for homogenous attitudes / perceptions / responses to local weather impacts.

„Just do it“ – how to bridge the global-local divide in the case of climate change?
Britta Acksel (Institute of Advanced Study in the Humanities, Essen)

Abstract climate goals and large scale climate science they are based on are disconnected to of most people’s everyday life (Jasanoff 2010). This is a central problem for reaching the goals that climate sciences set, since they can only be reached if people, especially in western-industrialized countries, change their mind-set and behaviour (Diefenbach et al. 2014). I would like to introduce to you how we try to tackle this divide and what our experiences are doing so in the transformative research project “Energy transition in the Ruhr Area”, which is located at the Institute for Advanced Study in the Humanities in Essen. The starting point of this project is the divide between abstract climate goals and futuristic climate policies on the one hand and how much is needed to be done to reach these in everyday life in the Ruhr Area, the former industrial heart of Germany, which till today is in a process of multiple structural changes. The idea was to find out what people in this area do that till today is associated with coal mining and steel production, to be more sustainable. We
did ethnographic research with civil society actors who are engaged in a wide range of activities that focus on sustainability. By doing research with actors who do aquaponics, community supported agriculture or use new media for environmental education we looked at people, who engage in transformations in spite of the futuristic and abstract character that representations of climate change have. In our view these people have the potential to function as translators. Against this background we are writing ethnographic texts about a set of these actors, made ethnographic photos and film material which will be part of a book, as well as of a website. And we conducted a political experiment to close the divide we diagnosed between civil society actors, local politicians and administration.

Archetypical barriers to adapt river basin management to climate change
Klaus Eisenack (Division of Resource Economics, Humboldt-University Berlin)
Christoph Oberlack (Centre for Development and Environment, University of Bern)

There is little progress in reducing greenhouse gas emissions globally up to date, and the climate is already changing. Thus, adaptation to the unavoidable consequences of climate change has become a global necessity. In contrast to emissions abatement, adaptation considers an externality as given and aims at reducing its damage. Adaptation is required, for example, in the management of river basins that need to cope with changed hydrological cycles, new patterns of water scarcity and flooding. Frequently, complex collective-choice arrangements are in place in river basin management. Although field experts, policy-makers and scientists frequently request the adaptation of such collective-choice arrangements to the new stimulus, they also report barriers to adaptation. It has thus become of utmost importance to precisely identify and analyse barriers to adaptation.

Barriers can be understood as heterogeneous sets of factors and condition, some of them being institutional, that impede adaptation. There is much (but disconnected) case study evidence for barriers to river basin adaptation. There are not many studies, however, that compare barriers that occur in multiple river basins. There is generally a lack of scholarship in explaining why such barriers might come about – essential knowledge for those decision-makers that want to resolve them. This paper aims to identify and characterize those barriers that are typical for river catchments in order to contribute to their scientific explanation, and in order to contribute dealing with them in practice. Results shall be transferable between idiosyncratic cases.

The paper presents a systematic meta-analysis of 30 selected case studies on barriers to adaptation in river basins from all over the world. It aims at identifying actor- and institution-specific attributes of cases in order to contribute explaining barriers of adaptation. Coding is based the social ecological systems (SES) framework, adopted to climate adaptation. Archetypical barriers are derived from the coded case studies by formal concept analysis (FCA). This allows to identify re-occurring patterns at different levels of abstraction.

We find several configurations where actors that might make adaptation decisions typically do not have the incentives or the capacity to do so. Appropriate knowledge generating institutions are an important pre-requisite for implementing institutions that assign responsibilities and
decision-making power. Missing knowledge about the river system constrains adaptation more than missing knowledge about future climate change. Sole reliance on historical data is a frequent barrier. The risk of making ex post unsuccessful decisions that are non-legitimized frequently sets incentives not to adapt. Grandfather water rights can impede water reallocation during droughts.

**Drill local – think global: The "eternal ice" and the concept of a global climate**
Dania Achermann (Centre for Science Studies, Aarhus University)

The way climate has been researched changed tremendously during the 20th century. From the 1950s on and soon informed by the introduction of computer models, the focus shifted from a geographical human-related concept of climate towards a global phenomenon based on physical data and mathematical equations. This understanding was accompanied by a loss of the human dimension of climate. Instead of classifying climate zones and describing regional weather phenomena modern climate science has been informed by numerical data series of the past and present state of the atmosphere ever since. Besides tree-rings and ocean sediments, glacial ice was discovered as one of the most valuable archive of information about this state of the atmosphere in the past. Thus in the 1950s, scientists began to drill deep into the polar ice sheets in order to retrieve this information. Until then, the study of ice had been a field of local importance in countries with snow and glaciers. The knowledge produced had been linked to specific locations and local conditions. However, from the 1950s on, ice-core research transformed into a physics-based science and found its place within the global climate sciences. By drilling ice-cores as deep as 3000 meters physicists could gain samples of ice that was built thousands of years ago. Even though the drilling sites were located in very few eligible places mainly in Greenland (Camp Century), Antarctica (Dome C) or Siberia (Vostock) the findings fed the concept of one global climate and its variation. The samples of frozen water and the content of the tiny air bubbles trapped in the ice have henceforth served as a basis to reconstruct climate changes of up to 800,000 years into the past – temporal and spatial dimensions beyond human experience. This paper explores how ice-core research became a basic informant of modern climate science and how it contributed to the loss of human spatial and temporal scales of climate understanding.

**Climate catastrophe in discourses: a versatile rhetoric of emergency at different scales of time and space**
Johanna Gouzouazi (IRIST, Strasbourg University)

The aim of this communication is to question the relation between time scales and geographical scales in various discourses about climate catastrophe. In order to do so, I will compare two different types of sources and I will try to identify differences and similarities in discourses by actors seeking for local action on the one hand and global action on the other hand.

On the one side, interviews of environmentalists engaging locally for the adaptation to an irrevocably incoming climate catastrophe allow us to access to their own imagery of climate
crisis and perception of time horizon. It is also the opportunity to understand which scientific scenarios and approaches are to be used and translated into the collective-action repertoire (Tilly, 1984) of the Transition Towns. The field research took place in 2013 in France among some small local groups of activists. Although they were trying to reach a micro-local level by offering locally-adapted, alternative and resilient ways of life, they struggled at the same time with the difficulty of scaling up and registering as a “true and official” transition community: Transition Towns being a transnational movement, each group needed to import ideas, communication and collective action toolkit from the original movement (based in Ireland and Great Britain). It appeared to be truly problematic concerning the subject of climate change, often perceived as too global and theoretical by the local activists, while it was supposed to be a leitmotiv of the transnational Transition Network.

It is interesting to compare the difficult appropriation of climate catastrophe as an argument by Transition Towns with the use that is made of it at a completely different level, by actors who also try to influence political choices about climate adaptation. The second set of sources will be composed by a corpus of articles and official reports (such as those of the Intergovernmental Panel on Climate Change), emanating from institutions and climate scientists known for considering climate change as a global public problem (Aykut & Dahan, 2015; Jasanoff, 2010). With a radically different approach of climate adaptation than “local resilience”, these sources all are about scenarios of global-scaled technological solutions: geoengineering or climate intervention. “Technological fixes” for cooling the planet’s climate are officially discussed in scientific and political arenas since the 2000s (Fleming, 2010; Aykut & Dahan, 2015, Hamilton, 2013) and are highly controversial in the field of climate science, notably because of a scaling-down uncertainty about negative effects at many local scales.

With the methodological help of discourse analysis and political sociology, I will try to show that the use of arguments about short time horizons and catastrophic events can serve purposes that might seem radically contradictory in ideology but not incommensurable regarding the reality of climate governance. No matter the position of the concerned actors (as producers of speech), they have to struggle to maintain adaptation scenarios at a unique scale (whether local or global), in order to avoid (self-) contradiction.
The ongoing global trend of large-scale land investments (LSLI) alters governance of the commons worldwide. Evidence is increasing that a considerable diversity of business models is used to implement LSLIs in diverse economic, socio-political and ecological contexts. Business models can be defined as the organizational set-up used by private or public actors to structure their investment and production activities and their integration into value chains. Different business models interact differently with established governance systems (e.g. land tenure regimes, customary and statutory political authority) in the target regions of LSLI. They yield varying impacts in terms of sustainability, as operationalized through food security, environmental justice, altered gender relations, ecological sustainability and other evaluative criteria.

Recent research has identified, classified and described a variety of business models in use for LSLIs. Examples include, but are not limited to, individual farms, contract farming, nucleus estate farms, cooperatives, asset management models, agribusiness estates, and others. Despite the existence of different business models and their evolution in the context of LSLIs, it remains challenging to understand what business models are suited in what socio-political, economic and ecological contexts to perform well for whom and for what specific evaluative criteria. Furthermore, the dynamic interaction of established governance systems at multiple levels with business model choice, evolution and impacts remains largely unclear and requires further research.

This panel aims to advance this debate by bringing together contributions which address one or more of the following themes and questions:

1. **Characterizing business models**: How do different business models organize production, investment, and value chain integration? What types of business models are observed in LSLIs in different countries? What are the best variables to characterize business models and to study the interface between these models and the commons?

2. **Evolution of business models (robustness, change and failure)**: Why do some business models operate robustly over time while others fail? How do investors change business models over time? How do resistance and collective action at community-level in target regions affect the evolution of business models?

3. **Impacts**: What are the impacts of different LSLI business models for whom and in terms of what evaluative criteria (e.g. food security, environmental justice, gender, ecological sustainability and other criteria)? Who benefits, who loses and what are the key factors that explain the distribution of benefits? How do perceptions of benefits and
disadvantages change over time? Are there specific features of business models that account for more sustainable forms of LSLIs?

(4) **Governance systems:** How do different business models change governance systems in target regions of LSLIs? How are they changing the commons from a governance and rights perspective?

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Paper Contributors:

**Large-scale plantation and contract farming effects in Madagascar: evolution and impacts (cancelled)**

Perrine Burnod (CIRAD, Montpellier)

Heriniaina Rakotomalala (Observatoire du Foncier, Madagascar)

Aurélie Brès (Food and Agricultural Organization of the United Nations)

**The Tragedy of the Grabbed Commons**

Jampel Dell’Angelo (National Socio-Environmental Synthesis Center, University of Maryland)

Paolo D’Odorico (University of Virginia)

Maria Cristina Rulli (Politecnico di Milano)

Philippe Marchand (National Socio-Environmental Synthesis Center, University of Maryland)

The livelihoods of rural populations around the world rely on small-scale farming and use of land and natural resources often governed through customary, traditional and indigenous systems of common property. In recent years investments in land and large-scale land acquisitions have drastically expanded. It is still unclear, however, whether the commons are a preferential target of large-scale land acquisitions (LSLAs). Here we argue that the ongoing “land rush” could be happening at the expense of common property systems around the world. While there is evidence that common property systems have developed traditional institutions of resource governance that make them robust with respect to endogenous forces (e.g., uses by community members), it is less clear how vulnerable these arrangements are to exogenous drivers of globalization and expansion of profit-based systems of production. In common property systems, farmers and local users may be unable to defend their customary rights and successfully compete with external actors. We define the notion of “commons grabbing” and conduct an exploratory study that applies meta-analytical methods, drawing from the existing literature on LSLAs. Informed by political economy and political ecology approaches we code the selected cases on the basis of acquisition mechanisms, claims and property rights, changes in production system and power dynamics, and explore the structure of interactions across the different variables using association tests and Qualitative Comparative Analysis (QCA). We find
that the majority of the cases included in this analysis (43/55) could be examples of commons grabbing, and we discuss the implications of the interactions among the different dimensions of LSLAs.

**Commercial investments in land: insights from an assessment of the quality of investments in land in Laos**

Cornelia Hett (Centre for Development and Environment, University of Bern)
Vong Nanhthavong (Centre for Development and Environment, University of Bern)
Ketkeo Phouangphet (Centre for Development and Environment, University of Bern)
Michael Epprecht (Centre for Development and Environment, University of Bern)

The commercial pressure on land has exponentially increased in Laos over the last decade. Large-scale land investments in tree plantations, agricultural commodities, and mineral extraction, are increasingly contributing significantly to the gross national revenue. However, such investments may also have less favourable impacts on rural livelihoods and the environment, for example through inadequate compensations to farmers or a lack of adequate social and environmental safeguards.

To provide a more comprehensive picture of the concessions landscape, the Government of Laos (GoL) conducted a nationwide land investment inventory between 2007 and 2010. In response to an order by the Lao Government to its ministries of 2012, the Centre for Development and Environment (CDE) in Laos, together with Lao Government institutions, developed a methodology to update the national inventory and are complementing existing data with a systematic assessment of the “quality” of investment. The investment quality assessment explores aspects of legal compliance, as well as on economic, social and the environmental impacts, allowing analysts to explore and highlight trade-offs among the different dimensions of the quality of an investment. The initial filed survey has been implemented in a northern province (Luang Prabang) in July 2014, where 76 investments in the agriculture, tree plantation and mining sub-sectors were assessed through interviews with a wide range of stakeholders.

The results reveals a great heterogeneity in the qualities of land investments, particularly regarding the different legal, economic, social, and environmental dimensions of investment quality, as well as with respect to the economic sub-sectors, and the ways that investments were set-up. Firstly, a large proportion of agricultural and mining projects tend to consult and consent more often with the affected communities prior to project implementation, and contribute more to local economic development, including increasing household income in the affected villages, and overall they were perceived more positive compared to the e.g. tree plantation investments. Secondly, although small in scale, sand and gravel exploitation projects provide a greater number of jobs per hectare as well as higher wages per labour unit compared to projects in the agriculture and tree plantation sub-sectors. Lastly, projects in the tree plantation sub-sectors seem to have quite significant negative impacts on the environment in nearby areas due to encroachments on natural healthy forests and intensive use of agro-chemicals.
Two key fundamental factors appear to be influencing whether a land investment has an overall positive outcome: Firstly, the extent and type of land lost in affected villages (e.g. where many small-holder households lost large areas of previously intensively used land to tree plantations). Secondly, the degree to which affected communities were involved in the decision-making processes of the land investment project. For example, projects in the agriculture and mining sub-sectors appear to be more likely to engage local communities e.g. through consultations and consensus-finding processes prior to project implementation, and offer social development opportunities and new knowledge transfer to affected villages compared to tree plantations.

**Social and environmental performance of inclusive agricultural business models: A multi-country comparative analysis**
George Christoffel Schoneveld (Center for International Forestry Research, Kenya)

This paper examines the social and environmental performance of 18 inclusive business projects in Brazil, Indonesia, Mozambique, and Tanzania, covering the rice, sugarcane, soy, and oil palm sectors. It draws on primary cross-sectional household data and employs econometric models to identify the factors that shape smallholder participation and non-participation in sampled projects. It goes on to identify project features and contextual factors that have bearing on project outcomes. In doing this, various outcome dimensions are captured. This includes, amongst other, welfare impacts (using an asset based wealth indices), changes to livelihood portfolios and strategies, effects on land use dynamics and land-property relations, impacts on household food security, and productivity spill overs. The paper’s results provide some important insights into the inclusiveness of inclusive agricultural business models in the agricultural sector and how benefits are captured and distributed across diverse local stakeholder groups. This contributes to a more evidence-based debate on inclusive business and the development of more targeted interventions to better leverage increased investor interest in the agricultural sector for emerging inclusive green growth objectives.

**Large-scale agricultural investments – The different investment models, their evolution and their differentiated implications**
Ward Anseeuw (CIRAD & University of Pretoria), Mathieu Boche (Université Paris Sud)

In Madagascar, despite the failure of Daewoo’s land lease contract and the 2009 coup, large-scale land appropriations continue and the promotion of agricultural investments is still high on the political agenda. As such, the 2015 - 2025 agricultural policy foresees the allocation of 2 million hectares for export-oriented private investments and medium and large-scale plantations. At the country level, private companies investing in agricultural production are scarce. Between 2005 and 2014, 82 companies announced a large-scale land based investment in the agricultural sector but 90% failed. In parallel, others companies have tried to develop contract farming scheme but only fifteen succeeded. Lessons learnt and impacts and from the two most common business models in Madagascar, large-scale plantation and contract
farming, need to be analysed and compared to deepen the policy dialogue and policy design process.

In this context, what factors explain robustness and failure of large-scale farms and contract farming schemes? And to what extent the respective socio-economic and organizational impacts of these two business model affect, in return, their evolution?

Based on a census of large-scale land investment and fifteen cases studies, the communication analyses in a first part the factors that ease or obstruct investment implantation. Its successively questions the role of the instability induced by the political crisis, the government policies, the general environment for investment, the conditions to access to land, the agricultural constraints, the reactions of the local community and, also, the investors profile and business plan.

In a second part, the communication focuses on two companies producing the same crop in similar socio-economical and agro ecological contexts but developing respectively a large-scale plantation (700 ha) and a contract farming scheme (2000 ha, 8 000 producers). It compares their respective impacts at the household level in terms of job, incomes and innovation as well as at the community level regarding markets (land and labour), governance and inclusiveness/exclusion processes. Based on a quantitative survey (300 households), it aims at evaluating the impacts and explaining their unequal distribution. Contract farming models, which have also very controversial effects, prove to be in the present case more profitable for the company, the farmers and more generally for the local development.

In the third part, the communication underlines how socio-economic and organizational impacts affect evolution of the two business models over time. Large-scale farming model, developed by the company to boost the production of crop A, does not reach its goals due to a local land conflict. It even proves to be slower to develop and more expensive than the contract farming model. But the contract farming scheme, more and more inclusive over time, also becomes more fragile due to a high turnover of producers interested in contracting.

The conclusion draws on specific features of business models that account for more sustainable forms of LSLIs.
# A07 - Land grabbing - a phenomenon in Europe?
Friday 13 May 2016, 13.00-15.00, Main Building, Room 304

Panel Convenors:

Ramona Bunkus (Martin Luther University, Halle-Wittenberg)
Insa Theesfeld (Martin Luther University, Halle-Wittenberg)

This panel deals with European investments in land in Europe. Compared to typical agricultural land transactions of a decade ago, such investments now are larger in scale and quite capital intensive. The trend shows that more non-agricultural investors appear and the number of foreign investors increases. Yet, “foreign” means, here, mainly other European nationalities. This development has attracted attention due to recent increases in agricultural land prices and widespread publicity on the complaints of local farmers. Changes in tenure governance and its socio-ecological outcomes are in the focus of this panel.

Large-scale land acquisitions increasingly take place not only in developing countries of the Global South, but also amidst European States. In contrast to investments in arable land in the Global South, investments in land in Europe are undertaken as an investment in already existing profitable farms. Sometimes, this happens not even by actually buying the land but by buying equity shares in agricultural companies. The Common European Agricultural Policy has partly promoted this trend by subsidizing the sector by area payments. However, land in Europe is not only a commodity traded on a market but fulfils many other nexus functions such as biodiversity host, leachate purifier, and recreation space. Furthermore, ownership of land has a strong emotional aspect and often a cultural meaning beyond the economic return on investment.

The individual presentations in this panel deal with large-scale land acquisitions in industrialized European countries. Europe means the whole continent, not only the EU member states. In contrast to the use of the more neutral term “large-scale land acquisition”, we would like to explore, whether we face similar negative externalities as in the Global South (ignoring the interest of smallholder farmers and rural population) with the investments in Europe. These should be rather framed under a notion with a clearly negative connotation “land grabbing”. Yet, studies on large-scale land acquisitions in Europe have yet to emerge and research is needed on whether there are similar negative externalities possible in countries with a generally functioning legal system, formal land rights guaranteed by the state and no dependence on the access to agricultural land for the livelihood of a large share of the population.

As important as large-scale acquisition of land is the issue of the ongoing trend of land ownership concentration in Europe. How the interaction of both processes works has rarely been studied. We would like to explore in particular the social implications of concentration in land ownership within Europe, including the impact on community engagement as a form of social commons. Another important feature we hope to examine is the environmental impacts
due to the standardization necessary for agricultural production on large tracts of land, such as monoculture and nitrate pollution due to intensification.

With the individual contributions in this organized panel we plan to approach the following questions:
We further explore the need for a refined concept of land grabbing in the European context. What are suitable social, cultural, ecological and economic criteria that needs to be developed and likewise operationalized to apply the concept? The contribution by Ramona Bunkus and Insa Theesefeld (Martin Luther University, Halle-Wittenberg, Germany) on “Socio-cultural externalities of European large-scale land deals and concentration processes” will present besides the concept, first results of an empirical study in East-Germany about the role and extent of such various impacts and the perception on those by the rural population.
Natalia Mamonova (Institute of Social Studies, Erasmus University Rotterdam, The Netherlands) compares current local responses ranging from support to resistance of rural population towards large scale land acquisitions in her paper on "The post-soviet agrarian capitalism ‘from above’ and ‘from below’: agrarian transformation, land grabbing and rural resistance in Russia and Ukraine".

Further open questions to be addressed by other contributors in this panel could be:
Where do these large-scale land deals in Europe currently take place? Is this a phenomenon limited to the Eastern Member States, or can it be found in the meantime in Western Europe, too? Do we see a particular role of non-agricultural investors, or particular purposes?
Which impact do these investments have on the dynamics of commons management of natural resources, such as community pastures or community forests?
Does the appearance of new actors in local arenas hamper local self-governance or are there potentials for leadership capacities that will even enhance bottom-up participatory governance self-organization?

Paper Contributors:

Socio-cultural externalities of European large-scale land deals and concentration processes
Ramona Bunkus, Insa Theesfeld (Martin Luther University, Halle-Wittenberg)

The European agriculture is in a process of change: Although to a varying degree, there is a shift from family farms to an increasing industrialised production enhanced by capital intensive investments from outside agriculture and increasing land prices. Production systems influence livelihood and are related to normative assumptions about agriculture. For example, in the Common Agricultural Policy (CAP) of the European Union, a multifunctional agriculture fulfils several purposes: it produces not only food and fibre, but also creates recreation at the countryside, income stability and functions as a preserver of rural spaces [1]. The insight of
normative significance is our starting point for further observations concerning rural population and how they are affected by structural change in agriculture induced by large-scale land acquisitions.

In Germany, the number of farms is decreasing while the size of farms is increasing. Between 2010 and 2013 there were 14 100 farms less \[2\]. It is assumed that this current trend of land concentration is fuelled by investments from buyers with a non-agricultural background, as it goes along with much increasing land prices. Aim of this paper is to explore if the current processes can be labelled as “land grabbing” (a term used predominantly for land deals in developing countries), considering their impacts on rural society. Yet, it also needs to be considered that the history of Eastern Germany was shaped by large-scale agriculture during the communist era. Current developments are still influenced by the privatization strategies of the post-socialist era, as the remainder of state-owned land gets privatized by a procedure known as additionally increasing prices. Further it is assumed that a new ownership structure in Eastern Germany will in the long-run impact on the behaviour of tenants and agricultural producers, as we face a share of 71% of the land under leasing contracts \[3\]. Large-scale farms are usually managed centrally, which may create a periphery with villages excluded from development attention.

These developments are further explored by a study in Eastern Germany, targeting the role of agriculture for rural communities and how it is affected by investments: Does the kind of labour change in the villages, are job contracts less safely, more monocultures on the fields, small-scale farmers disadvantaged? Are people more willing to leave rural areas? How does this affect the “commoning”, the social organization of rural life? The paper wants to explore the connection between normative demands concerning rural space, actual livelihood and living conditions on the countryside with their connectedness to farming to changes induced by investors. The analysis will lead us to new socio-cultural criteria that we need to consider in the debate on land grabbing in Europe.

The post-soviet agrarian capitalism ‘from above’ and ‘from below’: agrarian transformation, land grabbing and rural resistance in Russia and Ukraine

Natalia Mamonova (Institute of Social Studies, Erasmus University Rotterdam)

“The post-soviet agrarian capitalism ‘from above’ and ‘from below’: agrarian transformation, land grabbing and rural resistance in Russia and Ukraine”

While globally, land grabbing and the neoliberal agricultural model face with outright social resistance and mobilization of various rural groups, whose traditional subsistence schemas are threatened by limited access to land and associated resources, similar processes in the former Soviet Union do not provoke rural uprisings and slip ‘under radar’ of international social movements that defend small-scale farmers’ rights to land, food and sustainable living. The post-soviet rural population is traditionally considered to be politically apathetic, ignorant and unwilling to defend their interests in open confrontations. Furthermore, due to the socialist legacy of industrial farming, rural dwellers do not consider themselves as landowners and perceive large-scale agricultural development as revitalisation of former Soviet collective
agriculture. However, not only the absence of rural protests characterises the contemporary agrarian capitalism in the post-soviet countryside. It has emerged upon old socialist structures with preservation of many social relations and classes. Large collective farms were transformed into even larger modern agro holdings and mega farms, while rural population remained being dependent on subsistence farming at their household plots. In order to understand the socio-economic transformation in the post-soviet countryside we need to unveil the processes of transition to agrarian capitalism: ‘from above’ and ‘from below’. This study aims to answer the following questions: How do the ongoing land grabs and large-scale industrial agricultural development influence patterns of agrarian transformation in Russia and Ukraine? What challenges and opportunities do these processes bring to post-Soviet rural communities, and how these rural communities resist, modify, or accept the process of capitalist accumulation?

**Croatian Social Movements for Commons: From Resistance to Privatisation towards Transformation of the Public**
Tomislav Tomasevic (Institute of Political Ecology, Zagreb)

Croatian contemporary movements focusing on commons started in 2006 when initiative ‘Right to the City’ was formed in Zagreb. For 6 years it was mobilising thousands of citizens against construction of private shopping mall in downtown Zagreb and its massive car garage with entrance that enclosed the pedestrian public street (Medak, Domes and Celakoski, 2011). This project was dominantly financed by Hypo-Alpe-Adria, controversial Austria-based bank which had to be bailed out by tax payers’ money after many corruption scandals that led to conviction of former Croatian prime minister. Case study of Right to the City is important for many reasons including occupation of the pedestrian street in May 2010 for one month during which it was transformed into the commons. Street was managed by activists and citizens through cleaning, food, housing and cultural service which occurred before 15M, Occupy and other "movements of the squares" (Gerbaudo, 2014). It ended with defeat of the movement as the shopping mall was built but it contributed to development of other movements in Dubrovnik and Pula contesting privatisation of large urban commons.

Last resistance of Croatian movements for commons occurred from September 2013 to April 2015 against privatisation of the highways infrastructure. Croatian government planned to give already built public highways into concession so they would be managed by private company for next 40 years. This was advised to Croatian government by consortium of advisors consisting of Erste Group (Austria-based bank), ASFiNAG (Austrian publicly owned company for management of highways) and two other law and consulting companies. Furthermore this consortium advised that Croatian state guarantees the number of cars in highways exponentially increasing in these 40 years and any cars missing would be compensated by public money to the concessionaire. Offers for concession were submitted by three consortiums: Strabag (largest construction company in Austria), Goldman Sachs in partnership with an Austria-based pension fund, and Macguarie Group in partnership with another Austria-based pension fund.

Right to the City was instrumental in building a coalition of trade unions and civil society groups called “We Don’t Give our Highways” which contested the concession plan by using
referendum petition. Coalition in October 2014 succeeded in collecting more than 10% of signatures of Croatian voters in just 15 days which is a legal requirement to initiate national referendum on any issue. Constitutional Court in April 2015 banned the referendum to be held but also indirectly stopped the government to continue with concession. The movement went further to show alternative to publicly owned company HAC which is currently managing highways as it is linked with many corruption scandals. Coalition formed a working group aiming to transform HAC from state-based governance in which political parties use the company as their “private bank” towards commons-based governance in which different social groups participate in supervision of the company and management of highways as the commons. This process is inspired by some other cases like the transformation of the water company in Naples into commons-based governance (Mattei, 2013).

Collecting and using evidence on impacts of large-scale land investments on common property resources
Kerstin Nolte (German Institute of Global and Area Studies, Hamburg)
Markus Giger (Centre for Development and Environment, University of Bern)

Considerable evidence on the scale, geographical scope and dynamics of large-scale land acquisitions (LSLA) has been collected through efforts of a number of initiatives - amongst them the Land Matrix. While these initiatives are – despite the numerous conceptual and data-related problems and challenges (Anseeuw et al., 2013) – relatively strong on providing information on the scale of the phenomenon and the broad patterns (Anseeuw et al., 2012; Messerli et al, 2014), they do not provide for the necessary project specific details and projects impacts. Only for a small fraction of the land deals, information is available on previous land tenure status, previous land use, land use change, precise contractual arrangements, (intended) compensation or possible benefits such as social and productive infrastructure, job creation or involvement of local communities. Specific challenges for common property resources are seldom reported systematically.

Some of the challenges relate to:

- **Access to accurate, reliable, specific and dynamic data regarding impacts:** The collection of such data is all the more difficult as local specificities have to be taken into account and that the deals – or the implementation of such deals – are highly dynamic. In addition, as Oya (2013) notes, the presentation of quantitative data on the deals themselves as well as on their impacts can represent an instance of ‘false precision’. The usefulness of these datasets and some of the possible side effects of their abuse or bad use has to be critically explored. Also, the methodological challenges and the weak foundations of the data leave much room for interpretation, which is then often subjective and ideologically anchored. While some observers may downplay the impact of the phenomenon or may be inclined to stress the possible positive impacts of LSLA, smallholders’ advocacy groups may do the opposite. Bringing more objectivity to these positions is therefore an important objective. The paper may discuss the potential and challenges of global datasets to contribute to this objective.

- **The complexity of measuring of impacts of LSLA:** The latter is not only related to
the methods of measuring but also to the identification and definitions of the indicators, which have to be applicable in very different contexts and applied to very divergent cases of LSLA. On one hand, with regards to the assessment of the impact dimensions of LSLA, a balance will have to be struck between the complexity of impacts and the simplicity and objectivity of indicators. On the other hand, these measurements will have to be flexible enough to be case specific and to be contextualized. The paper may discuss specific challenges in reporting on LSLA with relation to common property resources.

Indeed, despite these efforts and related to these challenges, the available evidence on the actual impacts on local livelihoods and especially also the commons still is scarce. It has been proven to be a slow process of making available the existing evidence on impacts in an up-to-date, relevant and reliable and accessible format. Many initiatives do exists; several methodologies are being developed. But too much research is still remaining hidden and too few lessons have been drawn. New approaches and new alliances could advance research and practice alike.

Furthermore, questions still remain how exactly the documentation of such impacts and improved transparency on land deals can contribute to steer the process of land acquisition and land investments in view of more equitable and sustainable outcomes.
Sparked by the food and energy crises, wealthy food and energy-importing countries, as well as private national and international investors are acquiring land at an unprecedented scale, often in poorer “land-abundant” countries, in order to grow food crops and biofuels. While this land rush has also sparked an “academic literature rush”, so far few case studies have focused specifically on the commons and on how local power relations are affected by commons enclosures.

Designated as “wastelands” or unused land by target governments, land governed under various forms of common property arrangements provide an ideal target for foreign and local investments.

Common pool resources however often sustain and enhance people’s livelihoods. Water and fuelwood are collected from rivers and forests and domestic buildings might rely on timber or thatching grass from woodlands. These resources if managed under common property institutions are also used for income-generating activities (e.g. selling fuel wood, woodcarving etc.). Last but not least, common pool resources provide important supplements to local people’s diets and often serve as a “safety net” for households during droughts. Pastoralists, indigenous people and women are generally seen as the main beneficiaries from the commons if they have access through common property institutions.

Despite their crucial function to local livelihoods, discourses of win-win scenarios and efficiency gains by investing in these “unused lands” are persistent.

This panel thus wants to investigate the impact of LSLA on the commons from a political ecology perspective, asking:

- What environmental and social impacts do these commons enclosures have?
- Who benefits and who loses out from commons enclosures?
- How do enclosures of commons affect and alter local power relations?
- How are enclosures of commons legitimized, by whom and with what effects?

Paper Contributors:

**Namibia’s commonages: A mirror of legitimacies in a plural legal context**
Laura Weidmann (Institute of Geography, University of Fribourg)

Namibia’s multiple land rights system divides national territory into state land, communal, and commercial areas. Although legally instituted since independence, this plurality of legal bases is still under fierce debate at various levels and scales.

By including Traditional Authorities* in the system of communal land governance, the Communal Land Reform Act (CLRA 2002) responds to a number of fundamental claims for
reconciliation, such as decentralising authorities and services (Constitution Art. 95), and the right to cultural and social identity (Human Rights Art. 22). At the same time, its goal of documenting individual land rights introduces an international legal standard, which undermines various pillars of the Traditional Authorities’ local legitimacy. While their accountability is now extended towards the government, their coercive sovereignty within their communities is inhibited: Local land governance in the north-central regions of the country are presently characterised by uncertainties of respective rights, duties, and scope of power between the different authorities.

In consequence, the commonages, or so-called communal grazing areas, have been neglected in the course of registration of individual rights; they are thus one of the most (or first) visible victims of administrative diversion, within the highly delicate matter of communal land management. It is therefore no coincidence that the matter of commonages has in recent years received increased attention within ongoing debates on various governance scales. The debates reflect how different claims to land as property or tenure, as commodity or commodity-producing asset can be instilled in decision-taking and policy processes without neglecting any basic right of the Namibian people.

By means of qualitative observation and interviewing methods, this contribution unveils the process of local appraisal and responses to new legal standards. The enactment of state law onto local realities is continuously being modified, which leads to new dynamics in legitimacies: while some see registration as the opportunity of self-extending against ascribed boundaries, others engage in active land management to realise what they perceive as a fair and sustainable land use within the village.

The aim is thus to typify and scrutinise various strategies of legitimisation – for both access to land and authority. In looking at individual decisions and practices towards the commonages with their distinct physical, social and legal characteristics, we succeed in drawing a fine picture of local legal cultures and the future scenarios for commonages in Namibia.

**Land grabbing in Ghana: Customary authorities at the nexus of acquisition and tradition (cancelled)**

Kristina Lanz (Centre for Development and Environment, University of Bern)

**An unbalanced deal: Large-Scale Land Acquisitions (LSLA) for forest plantations and gender in Kilolo district, Iringa region, Tanzania**

Désirée Gmür (Institute of Social Anthropology, University of Bern)

Tanzania has been prospecting for foreign investments since the mid-1980s when it changed to a neoliberal political and economic system after nearly 20 years of Socialism. This is reflected in various laws, policies and initiatives as well as the establishment of a National Land Bank, which aim at facilitating land acquisition for foreign investors. In the context of the food, finance and fuel crisis (Triple-F-crisis), many investors focused on biofuel projects between 2005 and 2008, many of which seem to have failed. The more recent investment undertakings’ focus is on food and forestry production and impact the use of former common pool resources on the land, especially agricultural land, water, pasture and trees for subsistence and cash.
But even though much has been written on these impacts in Tanzania (Locher and Sulle 2013, 2014) and Africa in general (Cotula et al. 2009, Toulmin2008), there is a notorious gender blindness and uncertainty in this literature (see also Doss et al. 2014), specifically as long term social anthropological research is lacking. Women’s experiences mostly are conflated with men’s, or women are treated as a homogenous and/or add-on category without having an explicit contextualized gender focus. No literature is so far dealing with the broader institutional changes in gender relations due to LSLA and the strategies women adopt to cope with these changes.

I aim to discuss preliminary qualitative data of my participatory observation research on LSLA for forest plantations by a British-based investor called the New Forests Company (NFC) in Kilolo district, Iringa region. I will focus on the impacts of the commons enclosure created by this land deal that impacts women differently than men; and especially the formers’ ability to fulfil their care work as they lose access to land and related common pool resources (e.g., fruit trees) for which mostly only men are compensated. I argue further that the commons enclosure through LSLA mainly has negative impacts on women, involving increased workload. It also increases wives’ dependency on their husbands because land and related resources like fruit trees, previously an important source of cash controlled by women, have decreased or are no longer available and land is mostly controlled by elderly men. Food security is therefore negatively impacted, with an imbalance between gender and generation based on this power relation. Further, compensation is perceived as insufficient because of lacking in transparency in pay-out schemes, scarce jobs available for local people generally and extremely low for women, and development and infrastructure projects are badly adapted to local needs or only beneficial for few and at a very late stage. The general assessment to be discussed is that especially compared with men, costs are higher than benefits.

Keywords: Large-scale land acquisition, gender, commons enclosures, impacts, costs and benefits

**Changing the buffalo law – the demise of common property pasture and the rise of a political elite in Sungai Tenang, Sumatra**

Heinzpeter Znoj (Institute of Social Anthropology, University of Bern)

Tanzania has been prospecting for foreign investments since the mid-1980s when it changed to a neoliberal political and economic system after nearly 20 years of Socialism. This is reflected in various laws, policies and initiatives as well as the establishment of a National Land Bank, which aim at facilitating land acquisition for foreign investors. In the context of the food, finance and fuel crisis (Triple-F-crisis), many investors focused on biofuel projects between 2005 and 2008, many of which seem to have failed. The more recent investment undertakings’ focus is on food and forestry production and impact the use of former common pool resources on the land, especially agricultural land, water, pasture and trees for subsistence and cash.

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Keywords: Large-scale land acquisition, gender, commons enclosures, impacts, costs and benefits

Transforming the periphery: the expansion of large-scale sugarcane cultivation in Ethiopia’s southern periphery (cancelled)
Benedikt Kamski (Institute of Political Science, University of Freiburg)

The Dark side of Contract Farming: Smaller-holder Incorporation in sugar cane Cultivation in the face of Large Scale Land Acquisition in Malawi
Timothy Adams
# A09 - Are large scale land acquisitions leading to "commons" and "resilience-grabbing"?

Wednesday 11 May 2016, 08.30-10.30, Main Building, Kuppelraum

Panel Convenors:

Thomas Breu (Centre for Development and Environment, University of Bern)
Tobias Haller (Institute of Social Anthropology, University of Bern)

This panel addresses the issue of institutional change in the property regimes of common pool resources related to land in various contexts. It extends the view on the Large Scale Land Acquisitions (LSLA) by focussing on the impact of LSLA on land and related common pool resources such as water, forestry, non-timber first products, pasture, game etc. European Investment often pays attention to voluntary guidelines and CSR policies in which a) land owners shall be compensated and b) former land users shall profit from getting access to wage labour. However, evidence from 11 research projects at the University of Bern on the issue indicate a dual type of institutional change with problematic consequences:

First, investments in the global south, namely but not exclusively in African contexts, is based on a transformed notion of property: Whereas in pre-colonial institutions land and related common pool resources did not belong to single individuals but rather collectively by group of members coordinated by leading actors, this notion is transformed to a notion of "customary tenure" that is de facto privatization of land controlled by leaders and their heirs who were part of the colonial administrative system. The second transformation takes place in the institutional change of land related common pool resources from common property to state property followed by a process of institutional fragmentation and disconnect of resources, which are interrelated in ecosystems: Common pool resources are since colonial and post-colonial times managed in separated administrative organisations (ministries) that base their governance on fragmented formal institutions (legislation on water, forests, agriculture/veterinary services, fisheries, conservation etc.), often without coordination.

Under these two conditions LSLAs create a double effect: First, access to former communally held lands is no longer possible as former members of a territory are excluded from the land now controlled by the elites and thus cannot ask for compensation when LSLA takes place. Second, access to common pool resources, which is often crucial marginalized members of communities (differences by wealth, age and gender) is no longer possible or not viable anymore as common pool resources deteriorate as a result of LSLA off site effects namely of reduced or more variable water resources availability. Under LSLA constellations it is the state that provides investors the right to use common pool resources (especially water) or to reduce common pool resources that make way for alternative uses of the land (pasture transformed into irrigated fields, forests cleared, wildlife reduced etc.). Former commoners and related user groups (f.e. pastoralists) therefore find themselves excluded. These changes challenge food security and reduce the capability of actors to meet cash needs from common pool resources, while wage labour is absent (f.e. direct sale of fish and veldt products or sale of secondary uses (access to pasture provide milk for sale and access to water that provides options of vegetable production for sale, etc).

LSLAs seem to undermine these strategies and we look for papers which unpack these processes in concrete case studies. But we are equally interested in unpacking local strategies of collective action, resistance and possible options for institution building in the context of
water governance affected by European investments, but papers dealing with other cases are welcomed as well.

**Paper Contributors:**

**From commons to resilience grabbing: Common Pool Resources, Institutional Change and Land Acquisitions**

Tobias Haller (Institute of Social Anthropology, University of Bern)

Recent discussions on large-scale land acquisitions (LSLA) highlight the need to go further back in history for the analysis of the impacts on local livelihoods. The debate over the commons in economic and ecological anthropology helps to understand some of today’s dynamics by looking at pre-colonial common property institutions and their transformation since colonial times. For Africa, Pauline Peters (2013) shows that traditional land tenure was misinterpreted as customary tenure without full property. This misinterpretation, originating in the context of indirect rules policies and leading to the final instalment of state property, continues to function as a legacy. Moreover, the colonial transformation of local political systems to govern land produced effects of central importance for today’s investment context: during colonial times new elites were created (such as chiefs) to manage customary lands of so-called native groups, who could use the land as long as it was of no value to the state. This elite as well as groups who saw themselves as first-comers, gained additional importance during a later post-independence phase, in which decentralization and privatization processes were demanded by donor agencies such as the World Bank. These neoliberal policies also viewed customary tenure as no real property and asked for new private land tenure systems providing security for national and international investments. Suddenly, local and national elites became exclusive landowners. This led to local competition and conflicts as the value of land increased and land related common pool resources (water, pastures, wildlife, fisheries, forestry) became legally disconnected from the land. Access to these resources as well as the use of land by former commoners started to become highly contested and restricted as local elites and national users were claiming access and control based on the notion of national property, private property and citizenship.

Studies in African floodplains illustrate this process and show how local groups developed common property institutions for interrelated common pool resources, especially water being the link to all of them and between them physically and institutionally. Before colonial times, these local regulations included ownership, use and governance (membership, monitoring and sanctioning) of the floodplains as a complex interrelated web of access to land and related resources central for resilience of these social-ecological systems. The analysis of institutional change (land and resource tenure) during colonial and post-colonial times provides an understanding of exclusion and fragmentation dynamics that led to commons grabbing as well as contestations over common pool resources. The main issue here is that LSLA hits on these previous institutional changes. Examples from Zambia, Cameroon and Tanzania illustrate how such institutional transformations from commons to state and private property facilitate LSLA and increase the potential longitudinal impacts of exclusion in relation to water and related resources as these are no longer available in the same quality and cannot provide food and cash security of the former commoners. Therefore LSLA is not only potential commons but as well resilience grabbing.
The land-water nexus in contemporary land deals: The case of biofuel production in Piura, Peru (cancelled)
Laura Tejada (Centre for Development and Environment, University of Bern)
Stephan Rist (Centre for Development and Environment, University of Bern)

Gendered Impacts and Coping Strategies in the Case of a Swiss Bioenergy Project in Sierra Leone
Franziska Marfurt (Institute of Social Anthropology, University of Bern)

In the last decade we have witnessed a rise in large-scale land acquisition projects on a global scale. Despite increased research activity, data on concrete implementation processes and perceptions of different groups of affected people remains sparse. This paper aims to address this research gap by providing empirical in-depth knowledge on the investment case of the Swiss-based company Addax Bioenergy in Sierra Leone and the impact on land related common pool resources, especially water.

The four-month fieldwork addressed questions of consultation, perceptions, impacts on livelihoods and coping strategies. Findings reveal gendered impacts on access to land and common pool resources, especially water in wetland areas, and adverse effects on livelihood strategies of women who have been marginalized through the formalisation of colonially transformed customary land rights which now exclude women's access. These impacts do not just undermine local food systems but cash income of women as well. However, evidence shows that women and other groups of affected people are capable of organizing within a complex institutional setting and perform institution shopping to increase their bargaining power compared to men and to the company. Through alliances with various actors they manage to influence the outcomes of the Bioenergy project through acts of resistance and therewith prevent further deterioration of resilience of their livelihoods.

The Global Water Grab Syndrome
Jampel Dell'Angelo (National Socio-Environmental Synthesis Center, University of Maryland)
Paolo D’Odorico (University of Virginia), Maria Cristina Rulli (Politecnico di Milano)

Analysing the large-scale land acquisition phenomenon through hydrological lenses leads to a new understanding of the effects of land deals on developing countries. Concepts such as virtual water and water footprint applied to studies on transnational land investments allow us to show how globalization dynamics involve and affect the water resources of developing countries. Such effects are often hidden but substantial (Rulli and D’Odorico 2013). A first preliminary assessment of the global acquisition of water through large-scale acquisition quantified the amount of water globally (and virtually) appropriated through crop and livestock production in the acquired land and its potential effects on food security in in the target countries (Rulli et al. 2013). This phenomenon may be driven by biophysical determinants - availability of irrigable land, for example - but it also results from unbalanced power relations and institutional weakness. Developing countries may be allocating water rights to land investors without taking into consideration the social and ecological impacts or to consequences for future water management options (Skinner and Cotula 2011). In other instances the term water grabbing has been used to identify the physical direct appropriation of local water resources through different systems of natural resources exploitation such as
hydropower (Matthews 2012; Islar 2012) and mining (Sosa and Zwarteveen 2012). There is, however, no clear definition of what ‘water grabbing’ means. This term exhibits a strong normative component, while its biophysical dimensions remain poorly characterized. This paper systematically reviews the peer-reviewed publications that use the term ‘water grabbing’. Through the literature review we systematize and discuss the different definitions of water grabbing looking at the typology of cases, the geographical scale, the biophysical aspects, the actors involved and the social and environmental outcomes. This review is useful to discuss the multidimensional nature of the water-grabbing phenomenon and provide some clarifications in terms of the definition of the concept. For this review we looked for cross-references among articles and used keyword search and identified 16 scientific papers specifically addressing the issue of water grabbing. As an analytical advancement we then discuss and provide an operational definition of water grabbing. The proposed definition is based on ethical/normative considerations and biophysical characteristics. We address the biophysical aspects involved in water grabbing such as the sources of water (blue/green) and destination of use (what is the purpose of the appropriation). Moreover we discuss this appropriation of water resources in terms of the actors involved looking at the characteristics of investor and target countries and whether they are water stressed. We then provide a definition and a framework for the quantitative assessment of water grabbing and we apply it to assess this global phenomenon.

Effects of foreign direct investments on water resources and its relevance for common pool resources

Thomas Breu (Centre for Development and Environment, University of Bern)
Peter Messerli (Centre for Development and Environment, University of Bern)
Stephan Rist (Centre for Development and Environment, University of Bern)
Andreas Heinimann (Centre for Development and Environment, University of Bern)
Christoph Bader (Centre for Development and Environment, University of Bern)
Sandra Eckert (Centre for Development and Environment, University of Bern)

Despite numerous articles on the drivers of large-scale land acquisition (LSLA) and its impacts on societies, the economy, and natural resources, the effects of agricultural investments in land on water resources have received only limited attention. Based on a journal article [1], this paper examines the validity of the assumption that international large-scale land acquisition (LSLA) is motivated by the desire to secure control over water resources, which is commonly referred to as ‘water grabbing’. To this purpose, we analyse the effects of 475 intended or concluded land deals recorded in the Land Matrix database on the water balance in and how these effects relate to water stress both host and investor countries. The analysis shows that implementation of the LSLAs in our sample would have the potential to further increase water savings through virtual water trade by 8.7%. However, this study also clearly shows that the effects of LSLA on water resources risk further aggravate competition over water in a number of host countries, namely in 15 sub-Saharan states. From an investor country perspective, the analysis reveals that countries often suspected of using LSLA to relieve pressure on their domestic water resources – such as China, India, and all Gulf States except Saudi Arabia – invest in agricultural activities abroad that are less water-intensive compared to their average domestic crop production. Conversely, large investor countries such as the United States, Saudi Arabia, Singapore, and Japan are disproportionately externalizing crop water consumption through their international land investments. Statistical analyses, among others, show that land investments originating in water-stressed countries have only a weak tendency to target areas
with a smaller water risk. To better deal and mitigate the negative effects of LSLAs on water resources a major policy challenge is to find appropriate governance mechanisms for investments in agricultural land. These mechanisms must be able to deal with the specificities of water as a resource, which is by nature variable over time and moves across administrative levels, political boundaries, and biophysical contexts. From a local perspective, adequate regulatory or legal provisions for guiding investments and for ensuring availability of and access to water for other user groups at different geographical locations are often lacking. A promising way of tackling LSLA-related water issues is offered by the principle of subsidiarity, which requires that policies and instruments at local and basin scales are complemented with regional and global regulations and binding guidelines on investment in agriculture, including specific provisions for water as a common pool resource.

References: 1. Thomas Breu, Christoph Bader, Peter Messerli, Andreas Heinimann, Stephan Rist, Sandra Eckert. 2016. Large-scale land acquisition and its effects on the water balance in investor and host countries. PLOS ONE (in press)
# A10 - The consequences for the commons of large scale investments in land & infrastructure
Wednesday 11 May 2016, 14.00-18.30, Main Building, Kuppelraum

Panel Convenors:

Annelies Zoomers (International Development Studies, Utrecht University)
Kei Otsuki (International Development Studies, Utrecht University)

European companies and funding agencies (often under the cover of various public–private partnerships) are very much involved in large scale investments in land and infrastructure development in various African, Asian and Latin American countries. Large-scale land investments in food and biofuels, but also in urban infrastructure, hydro dams, tourism complexes etc. are contributing to the rapid transformation of the landscapes, restricting people’s access to open commons (land, water, forests etc.) and leading to enclosures and fragmentation or competing claims. Local groups are increasingly under pressure as the consequence of three spatial trends which each is limiting local people’s manoeuvring space (Zoomers 2010): The rapid expansion of food and biofuels promote worldwide ‘monocultivation’, i.e., expansion of the areas used for industrial monocrops, for example soya, oil palm and sugar cane (Borras & Franco 2014; Budidarsono et al. 2014; Cotula 2012, 2014). Even though this might contribute to economic growth (employment, income etc.), it often goes at the cost of freedom of choice. Becoming an out grower or plantation worker is the only way to benefit, but producing monocrops often make producers more vulnerable (price and climate variability). Second, there is a rapid increase of ‘no-go areas’ as consequence of large scale investments in (eco)-tourism and, in particular, the boom of REDD+ in the context of climate mitigation. Facilitated through multilateral funding for reducing forest emissions, thousands of forest emission projects are currently being implemented on large areas of land in countries with remaining forest frontiers. Even though local people are supposed to share the benefits (e.g. providing ecological services), levels of remuneration are low and the cost of losing access to common pool resources is often higher than the benefits. In addition, large-scale tourism development (usually at beautiful sites) is occurring in many countries, and is often followed by real estate booms and rapidly rising land prices. In addition, processes of landscape destruction are increasingly a cause of exclusion and displacement. Governments in countries such as Mozambique, Peru, Indonesia, Zambia and Nigeria have generously provided enormous concessions for the exploitation of oil, gas, bauxite, etc. In countries such as China, Vietnam, Brazil and Ecuador, large-scale investments are made in hydropower dams, often in the context of climate change mitigation (green energy), forcing local people to move or become resettled (Pham Huu 2015; Tanner & Allouche 2011). Local groups are at best compensated for their loss of land, but the amount they receive is in many cases not enough to rebuild their livelihood in new locations.

In this panel we aim to analyse the consequences of large-scale investments in land and infrastructure, by focusing in particular on what happens to the commons (local people’s access and use of natural resources). Current discussions are very much driven by questions such as
how to stimulate ‘green inclusive growth’, ‘protecting local people’s rights’ (FPIC etc.) and taking care of ‘fair’ compensation. But what are the implications for local people’s manoeuvring space to ‘have the life they value – their capacity to develop their own plans and pursuing collective action? What new kind of civic-public and civic-private partnership do we see, what kind of negotiations are taking place? Do these help to defend ‘development as a freedom’?

Paper Contributors Session I:
Wednesday 11 May 2016, 14.00-16.00, Main Building, Kuppelraum

**Collective Action against Policies of Exclusionary Development in Cambodia**
Esther Leemann (Department of Social Anthropology, University of Lucerne)

Drawing from my ethnographic research and collaborative ethnographic filming on the social, cultural, political and livelihood impacts of large-scale rubber plantations on the Bunong - an indigenous people from Cambodia - the paper focuses on collective responses to processes of exclusionary development the Bunong communities are currently confronted with. The communities have been struggling for years now to follow the state designed and controlled process to get a communal land title in order to protect their collective land and forest resources - while in the meantime, their land has been signed away by state authorities to large-scale plantations or conservation areas. Just recently, communities started to engage in tripartite negotiations (involving representatives from affected communities, authorities and companies), hoping to resolve some of their most pressing problems (e.g. threatened livelihoods, protecting sacred places).

I look into communities’ responses to large-scale plantations and conservation areas, which fundamentally clash with institutional matrices within which resources are locally perceived, used, managed and contested. I present communities’ internal conflicts, when faced with outside parties – be they companies, government officials or conservationists – interested in the land, as well as their collective struggles in order to secure access to land and forests, but also to symbolic resources and development opportunities. The contribution highlights cleavages, inequalities, obstructions but also alignments and cooperation fuelled by new connectivities within and among the various social and political actors involved in these dynamics.

**Land governance for ‘development as a freedom’? Linking global processes to local collective action**
Annelies Zoomers (International Development Studies, Utrecht University)
Kei Otsuki (International Development Studies, Utrecht University)

What initially started as a media-driven hype on global land grabbing has developed into a well-established academic field of land governance and an important domain for policy intervention. The research over the past decade has deepened our understanding of how land, water and forests, which were once considered to be local assets are often transformed into global goods, and this has created competing claims between local actors and global investors.
We are now clearly aware that these claims can be observed not only in the usual farmland setting but also in cities, parks and mines as globalization does not select its spaces of influence. At the same time, local – both rural and urban – people are also fighting back, trying to retain control over the globalized local assets either by resisting further investments, integrating themselves in the investments or asking for intermediation from the local and national governments, which are usually at the side of the investors.

In this paper, we analyse effects of such local people’s efforts to regain control of their livelihoods resources in relation to global processes of investment and development policy intervention that increasingly focus on ‘inclusivity’, ‘equity’ and ‘sustainability’, as we currently witness in the promotion of Sustainable Development Goals (SDGs). How does each of this concept relate to each other and with emerging collective action that is shaped in the people’s everyday places? For example, when inclusivity of local communities within investment activities is emphasized, intra-community inequity underpinned by persistent gender inequality or access to local political patronage tends to be overlooked. Or, when environmental sustainability is promoted, inclusive development becomes secondary especially when local communities are seen as actors who overexploit natural resources. We argue that the concept of the commons potentially helps us understand how policies that promote development are practiced because it highlights the capabilities of people to claim their freedom to be included into the investment process; to define and defend equality; or to negotiate sustainable uses of their resources.

Applying the commons concept to cases of large scale investments in land and infrastructure derived from Asia, Latin America and Africa, this paper proposes a new analytical framework to look into new spaces of manoeuvring opened in the global processes of investments. We attempt to critically analyse these spaces by reference to the concept of ‘freedom’ following human capability approaches forwarded by Sen and Nassabaum in which people can more freely control the investment project processes to set terms of reference for inclusivity, equity and sustainability. The paper concludes by outlining pragmatic ways to identify and foster these spaces of manoeuvring.

**Commons, local people, and collective action amid large-scale investments: an indigenous case study from Taiwan**

Hsing-Sheng Tai (Department of Natural Resources and Environmental Studies, National Dong Hwa University)

Commons, including land, forests and wildlife, had historically been governed by indigenous commons institutions in East Taiwan. The rise of modern state regimes, and numerous large scale investments supported or initiated by them, led to several waves of enclosure which seriously eroded indigenous commons. In recent years, a new wave of enclosure started, usually in the name of carbon sequestration and/or developing tourism. The so called “China factor” has also significantly accelerated this process in terms of tourism development. This paper studies how large scale investments influence commons and local people, and how people organize collective action to defend their rights over commons in East Taiwan. I use a representative indigenous case study to demonstrate these processes and address thematic issues proposed by the panel.
The focal social-ecological system of the study is Danungdafu Forestation Area (DFA) in Hualien, Taiwan. Indigenous people of the Amis tribe used this land for sustaining livelihoods. During Japanese rule of Taiwan from 1895 to 1945, the Japanese government nationalized property rights of the DFA land, and leased it to private enterprises, encouraging them to develop the land for large scale cane sugar production. Indigenous people were forced to relocate to marginal lands, and suffered the collapse of community as well as deterioration of livelihoods. After 1945, the central government of Taiwan further strengthened nationalization and cane sugar investment policies. By 2002, sugar production in DFA completely ceased as a result of Taiwan’s membership into the World Trade Organization. Beginning in 2003, the DFA was transformed into a forestation area, and subsequently into one of the three large forest parks in Taiwan for tourism development. Some indigenous people initiated a series of protests against governmental policies which ignore indigenous rights over commons. However, lack of a friendly external institutional framework and of inter-community collaboration prevented progress toward rehabilitation of commons institution.

Two windows of opportunity may significantly change the development trajectory of the DFA case. Firstly, a few scholars launched an action-oriented research project in 2012 which aims to promote adaptive co-management, transformation, and system resilience of the DFA social-ecological system. This project seems to have enhanced networking among, and governance capacity building of, local communities, governmental agencies, NGOs, and academic community. Secondly, the results of the newest presidential and parliamentary election on 16, January, 2016 may signify a paradigm shift toward recognizing indigenous rights and institutions related to commons. The “Green Wing”, which traditionally advocates indigenous rights, for the first time wins the presidential position and the majority of parliamentary seats. It would be a highly critical academic work to observe how the newest political context exert influences on institutional change, local plans of collective action, and on collaboration and negotiations among different stakeholders in a representative case like DFA. The study may offer insights as to how people pursue a more just, as well as a more environmentally friendly development path in Taiwan.

Keywords: commons, large scale investment, collective action, indigenous right, Taiwan

**Sustainable livelihoods through large-scale land acquisitions? Patterns, processes and potentials**
Christoph Oberlack (Centre for Development and Environment, University of Bern)
Laura Tejada (Centre for Development and Environment, University of Bern)
Peter Messerli (Centre for Development and Environment, University of Bern)
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Large-scale land acquisitions (LSLA) alter smallholder livelihoods in target regions tremendously. Previous research on the livelihood implications of LSLA provides a rich source of case studies at local and regional scales. Despite, or because, of this wealth of contextualized, in-depth knowledge, the research landscape is highly fragmented in terms of contexts, regions and cases. Empirically rooted generalization across cases and contexts remains limited. Results
on the livelihood implications are contradictory, and it remains difficult to explain these differences consistently. The many varieties of LSLAs challenge the development of middle-range theories that would explain how and why LSLAs affect rural livelihoods in different institutional, socio-economic and ecological contexts. These could be a valuable analytical tool to underpin transformative collective action approaches at multiple scales for more sustainable livelihoods in LSLA contexts.

The objectives of the paper are therefore threefold: (i) to advance our ability to explain varying livelihood impacts; (ii) to enable a better interplay between two main sources of evidence on LSLA, i.e. the interplay between local, mostly qualitative case studies with large-N, mostly quantitative spatial analyses; and (iii) to advance transformation knowledge on potentials and strategies for more sustainable livelihoods in LSLA contexts.

To these ends, this paper adopts the notion of archetypes and synthesizes empirical case studies of LSLAs from Africa, Asia and Latin America by means of a meta-analytic procedure. It uses a systematic review methodology (structured literature selection, iterative coding, data analysis through formal concept analysis) to develop a diagnostic approach to LSLA analysis. Conceptually, we adopt Ostrom’s (2009) Social-Ecological-Systems (SES) framework. The results show that adverse livelihood impacts can be traced to a small set of processes with immediate impacts. These are supported by a few facilitating processes. We show how both process types are activated in specific conditions of the social-ecological systems in which they operate. Moving beyond the diagnosis of unsustainable livelihood changes, the second part of the results identifies social-ecological conditions, processes and strategies that are conducive for safeguarding or advancing rural livelihoods in the context of LSLAs. We find specific potentials at five main levels of individual and collective action. This paper is supposed to contribute to enhance our ability to explain the livelihood changes associated with LSLAs and to device collective action responses which match the specific social-ecological context of an LSLA.

Defending Social and Environmental Justice: Land Grabbing, Instrumental Freedoms & Politics ‘from below’ in the Context of Nicaragua’s Interoceanic Gran Canal
Elyne Doornbos (International Development Studies, University of Amsterdam)

The literature on the emergence of social movements in response to resource grabbing practices by powerful corporate and political actors has shown a strong focus on structure-agency interactions, but has often overlooked differentiations within social and environmental impacts and variations in resulting politics ‘from below’. In Nicaragua, the proposed Interoceanic Gran Canal (IGC) threatens to introduce restrictions on the access of riparian communities to the natural resources that constitute the primary assets of their livelihoods, thereby giving rise to various motives for mobilization. This ‘environmentalism of the poor’ shows striking resemblances with notions of social and environmental justice, with variegated politics ‘from below’ demanding recognition, participatory justice, distributive justice and/or the protection of ecosystems. This research seeks to analyse the emergent actors in response to the IGC, their contentious politics, and the transformative power thereof within the ‘arena’ in which struggles over natural resources take place. Their manoeuvring space is determined by the extent to which actors enjoy instrumental freedoms such as civil liberties and
transparency guarantees. The research’s social and institutional dimensions are merged through a mixed-methods strategy which enables both actor-based and structural analyses, and which consists of: semi-structured interviews with protest leaders, academics, lawyers and directors of nongovernmental organizations; participant observations during village workshops, opposition meetings, conferences, and a national protest march; and household surveys in villages within the IGC’s impact zone. Strategies range from the campesino movement’s direct resistance in the form of organized protests and the dissemination of public information about the IGC’s legal framework by an alliance of nongovernmental organizations, to independent impact assessments by academics, and, finally, the deployment of a human rights framework by the indigenous communities and afrodescendientes of the Caribbean Coast. Their distinctive demands – from the derogation of Law 840 to ‘free, prior and informed consent’ and complicity with land demarcation laws – share a common preoccupation with land expropriation, which is regarded as the IGC’s underlying rationale. The manoeuvring space for resistance struggles is progressively limited by the Ortega government through restrictions on the freedom of expression and other human rights, while the emergence of a critical mass is constrained by press censorship, a lack of openness, and poverty prevalence. The analysis of both increasingly limited instrumental freedoms and the ability of heterogeneous actors to foster or impede social and environmental change explores the potential for ‘good change’ within a context of power differentials and alterations in natural resource management for the sake of ‘development’.

Paper Contributors Session II:
Wednesday 11 May 2016, 16.30-18.30, Main Building, Kuppelraum

**Green enclosures, dispossession and “channelling globality”: A reflection on conflict and resistance in Tanzania’s wildlife management areas (WMAs)**

Corey Wright (International Development Studies, Utrecht University)

This paper focuses on the topic of ‘green grabbing’, namely the role of global tourism and conservation in facilitating new green enclosures and green dispossession in East Africa – all under the banner of win-win green economics. Specifically, I highlight the turbulence and conflicts emerging in Tanzania’s ‘wild’ commons with a special focus on the government’s latest neoliberal scheme, Wildlife Management Areas (WMAs). In accordance with the conference’s theme (e.g. global connections and local responses), I will consider Broad and Orlove’s concept of ‘channelling globality’ (2007) vis-à-vis the global projects of conservation that are reconstituting much of Tanzania’s rural spaces. In Tanzania’s WMAs, many cases of dispossession are threatening rural livelihoods, but in other cases, communities are appropriating and re-deploying these global projects through various situated struggles. In so doing, they are re-politicizing rural tourism and conservation – a pro cess of putting global tourism and conservation ‘back in its place’. In the paper’s conclusion, I consider Sherry Ortner’s concept, “ethnographic refusal” (1996), to problematize the lack of ‘ethno-graphic thickness’ that characterizes much scholarship on the topic of green grabbing specifically, and land grabbing more generally.
Development in the Name of Light: Case Study of Construction Process of the Large Hydroelectric Power Plant Khudon Khesi in Georgia
Ana Kurdgelashvili (Institute of Social Anthropology, University of Bern)

This paper explores the issue of transformation, resistance and social change caused by the ‘rush’ for land and energy resources in the post-soviet republic of Georgia. The recent global energy and food price crisis resulted in a proliferation of land acquisitions in developing countries by other post-industrial state and non-state actors seeking to ensure their food and energy supplies. Significant research has been carried out in Africa, Asia, and Latin America to study the interests of different actors, strategies for appropriation and resistance, existing systems for the management of natural resources, new institutional arrangements, the existence or inexistence of state and recognized legal frameworks, environmental impact and social change. However, there is very limited scholarship on this phenomenon in Eastern Europe and the Caucasus.

This paper offers an empirical case study of the long and highly debated construction process of the large hydroelectric power plant in settlement of mountainous villages in Svaneti, Georgia. Ethnographic work was conducted in the highland Svaneti, mainly in the village of Khaishi, where local population is awaiting for forceful resettlement after the state signed agreement with the investor, the transnational company Electra for the construction of large hydroelectric power plant Khudon Khesi. Qualitative research methods, namely, participant observation, semi-structured interviews, informal focus groups with local population, expert interviews, literature and official documentation review were used during the field work. This paper aims to show how international norms and local regulations enable indigenous groups and other stakeholders to have an impact on Khudon Khesi, the hydro-electric power plant negotiations, and the construction process, which is being actively debated for over the last 30 years and has significant impact on transformation and social change in respective region.

Assessing the economic effects of infrastructure development: a critical review in the context of Asian megaproject urban development
Delphine (University of Utrecht)
Patrick Witte (University of Utrecht)
Thomas Hartmann (University of Utrecht)
Tejo Spit (University of Utrecht)

Investing in large scale infrastructure generates effects on the (potential) economic development of metropolitan areas. Yet, until now only little empirical research is performed regarding the question how these effects can be assessed. The relationship between infrastructure investments and regional economic development is complex and many theoretical and methodological difficulties remain. On the one hand, the assumption that investing in infrastructure is an important condition necessary to sustain economic growth is sometimes doubted. On the other hand, it is argued that investments in infrastructure enhance the accessibility of urban regions and that in the slipstream of such investments social problems in urban regions can be tackled as well. Despite these contrasting views, there is at least consensus that transport infrastructure development is dependent on economic development and vice versa. This has important implications for the development of spatial structures and
transport networks in urban regions. Due to the connectivity of infrastructure, comparative advantages and disadvantages are created. This could lead to restricted access of some groups to open commons. Because of these varying effects in urban regions, measurement of the economic effects of infrastructure development is very important. Yet, in many cases the method of assessing the economic impact highly affects its results. Therefore, this paper focuses on a systematic evaluation of the methods for estimating economic effects of infrastructure investments. A critical evaluation is made of the method of assessment, including the underlying assumptions. This evaluation is related to a description of Asian experiences of large-scale infrastructure development, particularly related to megaproject urban development in Asian urban regions. Megaprojects have an impact on local common pool resources (CPR) directly and also change relative prices for land that put related CPR under pressure. The findings will also be related to European practices concerning investments in infrastructure. Finally, we will elaborate on ‘good governance’ practices for governments dealing with large scale infra-structure and economic development issues in their urban regions.

The Role of Floriculture Sector in Empowering Women in Ethiopia
Negash Teklu Gebremichael (Population, Health and Environment Ethiopia Consortium)
Zerihun Dejene Fitchteawek (Population, Health and Environment Ethiopia Consortium)

This study has examined the role of the floriculture sector towards women empowerment in Ethiopia. Five farms are purposively selected based on size of the farm, type of farming, and spatial distribution from the major floriculture concentration areas. A total of 675 women flower farm workers were selected through a systematic random sampling technique out of 8,148 farm workers for questionnaire survey. The research used both quantitative and qualitative techniques of data collection. Quantitative data were generated by administering a structured survey questionnaire while qualitative data were obtained through key informant interviews, focus group discussions, expert interviews, policy and institutional analysis, and site observation. Secondary data were also collected from published and unpublished reports available in various relevant agencies. The quantitative data were analysed by using SPSS and results were presented in tables and charts while content analysis was employed in analysing the qualitative data.

The survey results show that 75% of the respondents come from nearby areas probably due to the proximity of the farms. About 88% of the workers were within the age range of 18 to 30 years. There were 3% respondents whose reported age was under 18 years. With regard to education, 62% of the workers have completed 1-8 grades, 18.2% have completed 1-4 grades; and 15% of them had no formal schooling at all. As to the specific tasks in the farm, the majority of women workers (89.5%) are engaged in operation activities, while a few (8.7%) are assigned to management positions. The wage rate of the workers is low that it couldn’t enable the workers to meet their basic food requirements. As a result, most workers do skip their lunch. Due to their engagement in chemical use and equipment operation, flower farm workers are generally exposed to health hazards and safety risks. Accordingly, about 71% of women workers have experienced health problems in connection with the same. Moreover, on average 51.6% of the women workers indicated that they had never been informed about safety issues and never used safety measures and facilities, which indicates that farms need to improve the work condition and safety of farm workers very seriously. Up to 32% of women were exposed to gender based-violence in some flower farms. With regard to labour union, considerable proportions of the respondents were not sure about the very existence of labour union in their
farms. The study also found that 20% of women flower farm workers were able to cover their household expenses before their employment; whereas 87.7% of them are able to cover their household expenses after their employment. It can be concluded that getting employment in the flower farms has created an opportunity for women workers empowerment in terms of economic improvement, ability to make decisions on household expenditure, and their relative freedom from domination or violence. Nevertheless, most of the flower farms studied didn’t create a working environment which contains basic safety conditions to protect the health and rights of workers.

**Deforestation of the tropical rain forest at the lower Amazon in Brazil: transforming common pool resources into private property**

Karin Marita Naase (Institute of Social Anthropology, Philipps University Marburg)

The region at the lower Amazon and Tapajós Rivers at the federal state of Pará, Brazil, is undergoing drastic changes due to the implementation of mega-infrastructure projects, i.e. maritime harbours at the Tapajós and Amazon River, which are navigable for soybean vessels, and the bituminization of the high-way BR-163. The latter connects the soybean fields of Mato Grosso to the Amazon River and enables the shipment of commodities to the US, Europe and other destinations. As a consequence, soy bean planters and cattle ranchers have been appropriating small-holder’s farms and have been replacing small-scale agriculture by extensive soy bean plantations, destroying rainforest’s bio-resources (land, timber). Parallel to this economic “development” and transformation of nature into commodities, Brazil’s recent conservation policies aim to preserve common property regimes in regions of dense tropical rain forest, in order to conserve nature and to fix local population as part of the Brazilian “socio-bio-diversity” strategy. The early creation in the 1970s of the state owned forest Floresta Nacional Tapajós (FLONA) at the Tapajós River was a landmark to stop deforestation. Initially, it followed the “fortress model” of conservation; but during the last 20 years co-management models of conservation prevail – at least in theory. In any case, the Brazilian state should be the guarantor of common pool resource. But, due to the encroachment of soy bean production and due to the proliferation of cattle ranching in the region, pressure on FLONA and its inhabitants (“traditional population”, migrants) – and above all – pressure on FLONA’s buffer zone has increased. Above all, at the buffer zone agricultural entrepreneurs of the south of Brazil, acquired pockets of land and logged nearly entirely the remaining rain and second-growth forest. Despite their infringements on legally binding environmental legislation the Brazilian state did not intervene, surrendering the interests of local people and nature to the local power play.

In this presentation, my concern is to show what processes are taking place, and how the Brazilian state takes part in the transformation of commons into private property, as the transformation of property right regimes is often accompanied by deforestation and depletion of nature. I argue that the state facilitates the transformation of commons and other forms of local peoples' land property regimes into commodities by re-classifying territories and by re-labelling local social and ethnic groups in order to adjust them to public planning frameworks. Empirical base for this paper are data, which I collected intermittently during two years at the lower Amazon and Tapajós Rivers in the above mentioned conservation unit. Methodological tools are the analysis of testimonies of local people on political and environmental changes, the analysis of public conservation policies, and the analysis of property rights and their transformation.
# A11 - European zoological gardens, conservation discourse, and the commons in the South

Friday 13 May 2016, 10.00-12.00, Main Building, Room 331

Panel Convenor:

Samuel Weissman (Institute of Social Anthropology, University of Bern)

Not too far in the past, the stroll through a zoological garden would have presented itself quite at odds with what we experience today. While the inhabitants of cages or menageries would have been more or less the same - save some rather disturbing ethnological expositions - their purpose and method of exhibition are influenced by different ideological practices. Although the history of displaying the exotic and wild can be traced back to ancient times, developments during the imperial period evoked a boom of sorts. The establishment and institutionalisation of zoological gardens grew dramatically during colonialization from the 15th century onward. Firstly reserved for the pleasures of the elites, by the 19th century enjoying the curiosities won through colonial exploitations moved to the forefront of public Europe. This way, the sovereigns and elites were able to demonstrate proof of what lied beyond, what was conquered. The hierarchy of power from the rulers of the world to their areas of dominance was portrayed in the small encampments of what was soon to be known as zoos. It seemed, at the time, an ideal way of displaying the legitimacy of European rule over the ‘savage’ world. Moving towards the 20th century, desires to exploit clashed with new desires to preserve and respect what discoveries were made in ‘other’ areas of the globe. No longer could zoos encase animals out of context for simple display but aimed to extend their cages beyond the physical boundaries and use them as platforms. Platforms by which the natural realm could be reconciled with that of man - of the cultural. A new purpose for zoos was born. That of conservation and education. While conservation developed along its own history, the linkage to zoological practices has become inextricable from it. In light of this, it seems only prudent to establish the relationship between what conservation aims to do and how zoological institutions contribute to this. This relationship, although far from being transparent, has been growing ever more in recent times. The overarching question that has long been at the forefront, is whether the legitimizing instance of zoos has moved beyond colonialization of the physical realm of culture and nature toward one of responsibility over and reconciliation of the two? Which, by no means, precludes the possibility of a new form of colonialism based on ideology, formed by western policies. By this, the management of what used to be mostly common-pool resources in now postcolonial areas of the world, has become a practise of privatising and securing land and wildlife. Under the basic assumption of resource overuse in the commons, industry, states and other organisations have opted for more privatisation in order to secure them. However, while zoos fight to ensure the survival of wildlife as a commons, the actions taken to secure and monitor them can at the same time, paradoxically, put restrictions on the forestries, grazing land and fisheries which were once also part of common land.
Paper Contributors:

**International Agreements for Biodiversity Conservation**

Achim Hagen (Environment and Development Economics University of Oldenburg)
Jasper Meya (Environment and Development Economics University of Oldenburg)

Rapid species extinction and biodiversity loss are among the main environmental impacts of human activity, constituting a new age in earth history, the Anthropocene. At the same time several international studies have highlighted the value of ecosystems and biodiversity for human wellbeing and spurred an academic debate on the economic value of biodiversity and ecosystems. De-spite this, efforts to slow down biodiversity loss under the international Convention on biological diversity (CBD) hitherto achieved only little. As the benefits from biodiversity conservation exhibit public good properties international cooperation is needed to secure adequate conservation levels.

Since the 1990s a growing economic literature analyses the formation of international environmental agreements in a game theoretical framework. Most of these studies focus on the problem of climate change mitigation while more recently an evolving strand of literature focuses on fisheries. However, game theoretic studies that analyse biodiversity conservation agreements are sparse so far. Barrett (1994) models coalition formation as a super game and finds that a biodiversity agreement may not improve much upon global welfare relative to the non-cooperative outcome. Winands et al. (2013) argue that a more optimistic view might be possible, when the restrictive model assumptions chosen by Barrett (1994) are relaxed. In a more complex model with heterogeneous countries and limited ecosystem substitutability for a total number of four countries they use simulations to show that optimal transfers between countries can facilitate a large stable coalition.

Biodiversity as a resource has several attributes that distinguish the incentives for an international agreement on biodiversity conservation substantially from other environmental agreements: (i) Biodiversity has public good properties but conservation leads to local and regional benefits at the same time. This might call for polycentric governance approaches and change the size and stability of coalitions substantially. (ii) Biodiversity is not a homogenous good and different ecosystems and their services are imperfect substitutes. This raises the question if it is possible to cover different ecosystems with one conservation agreement as also empirically we see different overlapping agreements emerge (e.g. CBD and Ramsar Convention on Wetlands). (iii) Countries are heterogeneous in their endowment with biodiversity, giving rise to differing bargaining power.

Our paper provides an overview of the literature on the economics of biodiversity and the formation of international agreements for biodiversity conservation. We compare the properties of biodiversity as a resource with those of fisheries and the mitigation of climate change to derive key features of biodiversity agreements. A comparison of the different approaches to international environmental agreements for the provision of common resources helps to make game theory conducive for the analysis. As a result, we identify key issues for future game theoretic research on international agreements on biodiversity conservation.
Reflection of Global Changes in Local Governance of the Commons: The Case of African Parks Foundation in Nech Sar National Park, Ethiopia

Girma Kelboro (Center for Development Research, University of Bonn)
Till Stellmacher (Center for Development Research, University of Bonn)

In Ethiopia, changes in understanding, institutions and governance of biodiversity and landscape originate from the global trends in conservation. In this milieu, we will analyse and illustrate involvement of the African Parks Foundation (AFP) in Nech Sar National Park conservation within the context of the terrain of international NGOs and private actors in conservation, and how that served or disserved self-organizing experience of local communities. We also show the final outcome of the NGO intervention and indicate lessons learned. We collected empirical data through semi-structured interviews with sample households (120 pastoralists and farmers), in-depth interviews with key informants and conservation experts who worked for the AFP, and review of archival sources. The AFP improved the financial capacity of the park management by more than 10 times while the personnel was doubled as compared to the capacity under government management. Our results show further that the approach of AFP is characterized by redefining how local communities interact with their environment. This strengthened exclusionary conservation stalled by government conservation authorities. The ambition of AFP was to create a business-oriented conservation system in line with the concept of “capitalism and conservation” promoted recently globally by private players and NGOs in environmental conservation mainly by developing ecotourism (and now, carbon market), the concept itself was new and vague to all the people interviewed. Self-organizing tradition of local communities, mainly the Gada system of Guji pastoralists, was further marginalized by new institutional arrangements of the AFP. From our overall observation, we recommend a prior understanding of the locally specific context to serve as a foundation to introduce and adapt new concepts, institutions and practices for governing the commons.

Zoos and the resurrection of social evolutionism

Eva Keller (Department of Social Anthropology and Cultural Studies, University of Zürich)

Until about one hundred years ago, the Masoala peninsula on Madagascar’s east coast was practically uninhabited (as far as one knows). After the abolition of slavery by the French, the peninsula’s vast tracts of forested land became a common pool resource for freed slaves or their descendants in search of land to start a new life. Over the course of several generations, many succeeded in doing so having created their own “land of the ancestors” on the peninsula and thereby having shed the legacy of slave descent. With the arrival of the Masoala National Park, the peninsula has become subject to Green Grabbing, a process in which the Zurich zoo is involved as one of the park’s most important sponsors and ideological supporters. Having lost their original raison d’être as places for the display of exotic animals (and, at times, people), zoos find new legitimation as nature conservation centres which not only sensitise the general public to relevant issues but are also actively involved in specific nature conservation projects, mostly in the South. The Zurich zoo has spearheaded this development. Not surprisingly, zoo staff are trained as zoologists, veterinary scientists, botanists, and so on. Yet by supporting specific nature conservation projects, they exert considerable influence on the lives of those who live close to or inside conservation areas even though they lack any training or experience as development professionals and have generally very little
understanding of the historical and social contexts in which they operate. The Zurich zoo’s involvement in Masoala is a case in point. Justifying its involvement in Masoala, the Zurich zoo wholeheartedly embraces a discourse which defines all those who “fail to understand the importance of nature conservation” as lacking in knowledge and education to be provided by such as the zoo itself, whereas embracing nature conservation is represented as a manifestation of evolutionary progress. Through this discourse, the “backwardness” of people such as the farmers on Masoala is resurrected and rehabilitated in a “green guise”. As a tremendously popular public venue with regular press coverage, the Zurich zoo – besides meddling with the lives of farmers in Madagascar – is a significant contributor to the re-popularisation of such 19th century ideology.

**Negotiating compensation and security in private protected areas: Conservancies, Zoological Gardens and the pastoral encounter**

Samuel Paul Weissman (Institute of Social Anthropology, University of Bern)

This paper deals with security issues in private protected areas that receive support from zoological gardens and the impact this has on pastoral commons. Research was done in the Lewa Wildlife Conservancy (LWC), a private PA situated on the intersection of the three counties Meru, Isiolo and Laikipia in Kenya. With the size of 62’000 acres LWC has high costs to adequately secure its area containing wildlife such as black rhino which are the main focus of their conservation efforts. One major challenge is that a public road is running through part of the conservancy and creates a critical interaction point in an otherwise physically quite excluding system. While it is public space and herders can use it, grazing personal livestock on LWC property is not. However, a section of 30 meters on each side of the road may legally be grazed. There are certain markers along the road which designate the boundary and the rangers patrol to make sure the rules are followed. On encounter rangers - who claim to have a friendship relation in the official discourse - rather use a paramilitary police style appearance in khaki gear and heavy firearms in order to force “wrongdoers” from moving a bit further off the limits set by the conservancy. Herders however use a counter-discourse explaining that wildlife creates damage to property and the small fields of the agro pastoralists as wildlife trespass the boundary of the conservancy. However, herders face legal pluralism that reduces their options to ask for rightful share in being compensated: While the territory is private, the animals are state property and thus compensation has to come from the state to which access for compensation is difficult. Such conflicts occur on a daily basis within the boundaries of the conservancy and lead to high security costs to secure wildlife and mitigate human-wildlife conflict in the region. From roughly 200 employees at the LWC, the majority is made up of security personnel. This personnel is subdivided into two forces. The ranger force and the APU, Anti-Poaching Unit. This last section incorporates highly trained soldiers, two tracking dogs and a helicopter. To finance this small army of human-wildlife peacekeepers, most support comes from donors. One of these major donors is the Zoo of Zürich. Their strategy includes mainly the support of the Anti-poaching Unit, the elephant corridor and rhino resettling. While LWC itself follows a discursive ideology that conservation is first and foremost about people, the Zoo of Zürich evidently supports the security of wildlife as their legitimacy behind conservation. These two ideologies seem to clash in a world where a herder will graze his cattle next to wildlife and two rangers that tell him that the two need their separate spaces to exist.
The Role and Effects of European Zoological Gardens in Wildlife Conservation
Discourses
Eric Jensen (Department of Sociology, University of Warwick)

European zoos have a dark history when it comes to wildlife conservation. For much of their history, Europe’s historic zoos such as London Zoo commissioned the killing and in situ capture of wild animals from distant lands with no regard for conservation. Today, zoos present a radically different image, foregrounding their conservation role as their raison d’être. While zoos are not alone amongst institutions reshaping themselves to be more palatable to changing societal sensibilities, their transition from being part of the conservation problem to part of the solution has left them with a persistent legacy of anti-zoo resistance. In this context, zoos feel the need to demonstrate their value both as in situ agents for wildlife conservation and ex situ educational providers aiming to engage their audiences with a conservation discourse.

Historically, modern European zoos emerged from an Enlightenment fascination with scientific identification, categorisation and curation of animal species. Indeed, the presentation of animal species in zoos still bears the hallmarks of this scientific history. Yet, a scientific approach has only recently been applied to evaluating contemporary European zoos’ educational role of communicating conservation messages to its public and school visitors with. This presentation outlines common public educational practices in European zoos, and their strengths and limitations. It then reviews and presents key research findings about how public visitors respond to zoo-based conservation education. In particular, the patterns of impact stemming from zoo-based public education practices are becoming increasingly clear in light of recent research evaluating public and school children’s outcomes stemming from zoo visits. The conclusion of this presentation will discuss the role of zoos in pro-conservation social change in light of existing research and theory.
Malawi is an agro-based economy which is highly dependent on rain-fed agriculture. The impacts of having this as a means of farming is, with the changing climate, communities and households that are vulnerable to the impacts of climate change are on the rise leading to situations of hopelessness in terms of hunger and malnutrition. Irrigation for over three decades was only practiced by estate owners and those with land access and control to close to water bodies. Though this is the case, irrigation is deemed the solution to the changing climate to meet the demands of food and to offset the impacts of climate change on livelihoods. With the increasing demand for food and large scale farmers investing in irrigation, there is a new wave of investing in irrigation as a means to produce more for the market. However, as much as there is a drive for irrigation farming in Malawi, and having the country’s third of its land covered in water, one would hence assume that irrigation is the solution? In the experience of promoting irrigation as a means of building communities resilience to impacts of climate change, the most vulnerable communities are now met with the challenge of having no water for irrigation as the catchment areas are not supplying enough water for the water reservoirs such as lakes, wells and rivers where the communities are supposed to pump water from. This drive for irrigation has led to more inequalities created as women spend hours creating canals and pumping water through treadle pumps from long distances as the water is drying up and the communities are faced with new challenges. The scenario at present is, since the rain has been affected by El Nino, the water levels have gone extremely low for the past two years and a solution to the challenge of food security is becoming a burden to smallholder farmers especially women farmers. The solution would be catchment conservation in all areas and wetland management to ensure that the few communities that are able to access water are able to utilize solar powered irrigation equipment to produce enough food. Irrigation without catchment conservation is rendering communities more hopeless especially women as they are responsible for the burden of work of digging canals or using treadle pumps to access water. The issue of land also is a hindering block to practising irrigation by smallholder farmers as land close to water bodies is deemed as public land and can be accessed by anyone leading to low investment by farmers on those pieces of land. Priority areas for research would be the conservation of catchment areas as a solution to irrigation development. Also, the issue of modelling in terms of how do communities model...
the existence of water based on the supply of water from catchment areas and also how length of time for a catchment area to supply enough water in a sustainable manner for irrigation to develop that benefits the smallholder farmers, especially women farmers.

From the utopia of win-win development to bottleneck situation. Case studies of Office du Niger area (Mali)
Jamin Jean-Yves (CIRAD)
Adamczewski Hertzog Amandine (CIRAD)

Many African countries base their agricultural development on irrigation. In Mali, the Office du Niger area (ON) is at the heart of national agricultural policy. The government, supported by international donors, developed the public irrigation scheme of ON for family farming. Since 2006, the Agricultural Orientation Law (LOA) states that agricultural development should be based on family farming and on large-scale (capitalist) farming. Given the decline of official development assistance, the Malian government chose to appeal to new investors (private, public, national or non-national) to develop irrigation infrastructures.

This paper analyse two case studies: PSM project, and Grand Moulin du Mali project (G2M). The Markala Sugar Project, launched by the Malian government in 2002, was planned on 40,000 hectares within the largest irrigation system of West Africa: the Office du Niger area. The South African investor was the main sugar producer in Africa. Therefore, the project was based on an industrial model previously applied in other countries: the sugar cane cultivation by using direct labour operation and farming contracts. However, right after its official launching, the project faced important claims from farmers who traditionally used the dry lands allocated as future sugar cane fields. The project, planned on a surface of about one third of the total area developed for irrigated agriculture by the Office du Niger operator in about 80 years, was thus in direct competition with family farmers for access to land and water. Moreover, the initial plan of the project could lead to a deep restructuring of the social environment of family farmers. By increasing the pressure over land and water, the project could reduce the capacity of the family farmers to get a marketable surplus in rice production. Hence, this situation could result in difficulties to pay the debts and in an increase of poverty that means the farmers will become the workforce of the agro-industrial firms. Despite these 10 years efforts, the project stopped before applying its plans. An Indian firm tried to take over the project but also failed.

The G2M project was driven since 2010 by a Malian investor whose will was to grow export crops by using centre pivot irrigation technique on about 10,000 hectares. Family farmers lost rain fed cropping lands from the early beginning of the project. Farmers’ representatives claimed for the end of the project but the political and economic power of this investor in Mali allowed the project to continue.

This paper first presents an analysis of the large-scale investment projects by focusing on the actors’ strategies: investors’ motivations, farmers’ claims, and the role of the Malian State. Then, the two projects will be analysed regarding the risks embedded in the original plans or those which already occurred. Finally, we will discuss the possible impacts of the large scale investment projects on the management of resources that are currently used by historical actors within the Office du Niger area.
Insurance policies for collective action problems: theory and empirical application to electricity infrastructure

Christian Kimmich (Environmental and Resource Economics, Swiss Federal Research Institute WSL)
Luis Medina (Juan March Institute of Social Sciences, Universidad Carlos III de Madrid)
Hannu Autto (University of Turku)

Ecological challenges often entail collective action problems. Classical studies on commons, collective action and norm emergence have repeatedly confirmed that collective action problems are often characterized by the presence of multiple equilibria. In addition, the role of incentive schemes (concerning e.g. selective incentives, cost and benefit allocation or insurance policies) varies depending on the type of collective action game in question. We study the theoretically optimal incentive scheme for collective action games and how it varies depending on the type of game in question. Generally speaking, the optimal incentive scheme, understood as the policy that maximizes the likelihood of collective action, depends on the type of collective action game in question. This means that the optimal policy depends not only on other players’ incentives, but also on the success-function of the game mapping the number of co-operators to the likelihood of successful collective action.

Multiple equilibria games are analytically challenging as players’ best replies depend on the likely actions of others. In order to draw comparative statics for studying the effects of incentives it is necessary to combine the incentive structure of the game and players’ beliefs on likely actions of others. For such games, there are no clear-cut strategic dominance criteria that would predict the outcome, and the equilibrium refinement program has so far not yielded a satisfying method.

Using an n-player collective action model with heterogeneous payoffs, we discuss a previously little studied class of incentive policies, namely insurances. Insurance policies seem to have the potential to increase the likelihood of collective action with relatively small risks and costs for insurance providers as they increase the so-called ‘sucker payoff’ of potential co-operators. We are studying the optimal use of insurances and their relation to other incentive schemes. The optimal use of insurances depends both on their potential to create new (cooperative) equilibria and on their ability to increase the likelihood that the system will converge to a cooperative equilibrium. After outlining the theoretical model we discuss our findings using electricity network problems in Indian agriculture.

In India, a large share of irrigated agriculture in India is electricity driven, utilizing roughly one fifth of all electric energy available for end use. The inefficient use of electricity, partly driven by subsidization policies, has led to overexploitation of groundwater resources and electricity infrastructure. Policies to improve power quality and efficiency via distributing new irrigation technology have so far failed, as they neglect common-pool properties and network externalities that keep farmers in a low equilibrium trap. Investments are economically rational only if a sufficient number of farmers simultaneously adopt an efficient technology. We show how an incentive policy could facilitate a transition toward a Pareto-improved equilibrium.

Pastoralism under Climate Change: Perceptions of Climate Change, Local Adaptations and Institutions in Northwest China

Lu Yu (Humboldt University, Berlin)

Losses caused by climate events are likely to increase as a result of climate change. The livelihoods of resource-dependent residents are vulnerable to such changes. This paper
develops an institutional perspective on local adaptation to climate risks. The case study was conducted in two pastoral counties of northwest China, a region confronting frequent drought and undergoing extensive institutional change in last three decades. The study shows that local residents view drought as the most significant climate change-related threat to their livelihoods, and they adapted to it by diversifying livelihood, involving in market exchange, or increasing storage, while previous com-mon pooling reduced dramatically. However, we argue that these adaptation might not be a direct product for coping with climate risks, but instead part of the livelihood strategies that resulting from joint impacts of institutional, social-economic and climate changes. We find out that current institutional arrangements of pastoral China, whether improve pastureland quality or not, have some negative impacts on local climate adaptations, especially those having limited livelihood options, and therefore might foster an increase in inequality among households and across communities in the long term.
Series B: Collective Action, the Commons, and Sustainability: What is the Role of Bottom-up Participatory Resource Governance (“Constitutionality”) in Switzerland and other European Political Systems in Common-Resource Governance?

# B13 - All commoners are equal? The impact of different distributions of power and social inequalities within CPIs
Wednesday 11 May 2016, 08.30-10.30, Main Building, Room 331

Panel Convenor:
Maïka De Keyzer (Department of History, Utrecht University)

Historical institutions for collective action have a track record of successful management of natural resources in Premodern Europe. In an increasingly urbanised, commercialised and exploited world, these institutions were able to reduce risks and costs, while maintaining a sustainable management of the natural environment. Throughout Europe case studies have shown that these institutions can endure for centuries and can prevent a tragedy of the commons from happening (Ostrom, 1997; De Moor, 2009, 2002; Winchester, 2008, 2010; Lana Berasain, 2008).

A bottom up management and regulation of the commons has been pinpointed as one of the vital aspects in obtaining this ecological and social success. Rules were not imposed top down, but were formed from the grass roots level upwards. The involvement of the community of users in managing and regulating the commons and distributing the benefits towards the different strata within rural communities has been a much debated topic. Who was exactly involved and what was their level of impact on the decision making within the community? Was it vital for all the community members to have an actual vote or were village representatives enough? (Haller et al, 2015; Agrawal, 2005) This debate deserves more attention and especially from a historical point of view. Has the concept of participation and decision making evolved through time? But more importantly, historical case studies have shown that the functioning and level of sustainability of the commons could diverge quite significantly, because of divergent social constellations and institutional frameworks. While some societies include practically the entire village community in the common pool institutions and share the ecological benefits among the different social strata, others have a more exclusive constellation. What is the effect of such divergent social constellations on ecology and functionality? Within this panel we will focus on the social distribution of power within communities, the actors behind the common pool institutions and the impact thereof on the functioning of the commons and the level of sustainability in Premodern Europe.

Central topics/discussions will be:

- The (evolution of the) participation level of community members in common pool institutions
- The impact of polarised or equitable communities on the distribution of ecological benefits among community
- The impact of external factors on the participation level within the commons
- Institutional change because of societal evolutions
- The link between sustainability and participation level
- The causes behind exclusive and inclusive institutions
- Social stratification of excluded groups and the effect upon their social position within society
Commons, Social Inequality and Institutional Asymmetry in Early Modern New Castile (Spain). A Comparative Perspective on the Resilience of Common Pool Resources.

Javier Hernando Ortego (Department of Economical Analysis, Universidad Autónoma de Madrid)

The objective of this paper is to analyse the consequences of economic, social and institutional inequality in the access to common pool resources, focusing in how they affected the sustainability of the commons in the region of New Castile during Early Modern Age. A comparative study of three selected areas is carried out; they presented differences in geographical and environmental conditions, which arose in various productive specializations. First, the Alcarria (Guadalajara province), a plain area dedicated to agriculture cereal with an important presence of sheep farming. The Sierra de Guadarrama (Madrid) is a mountain area with preponderance of livestock and forestry. The third case study is the Montes de Toledo (Toledo province), a mid-mountain area with forestry orientation. On the other hand, these three areas present certain social and institutional similarities, as is the predominance of peasants with small holdings - with a relatively low level of social inequality- and a remarkable economic and social importance of commons. In addition, they were affected by the growing impact of the urban market of the city of Madrid.

The study of inequality focuses on two levels, social and institutional. Economic and social disparities within rural communities were basically due to the process of market integration and differences in the property of land. The result was the strengthening of local elites that developed exclusion mechanisms of common pool resources and supported the privatization of the commons. One consequence of the extension of economic and social inequality is the emergence of differences in political participation within the local council, the institution that managed commons in Castile. This process was more important in larger villages, in which wealthy minorities and privileged groups controlled the council officials, while in the small villages the political participation of neighbours in council decisions was generally maintained.

In premodern Castile we find another level of institutional inequality, as is the asymmetry between urban and rural councils in the regulation of commons. The characteristic municipal institution was the town and district council (concejo de villa y tierra), whose jurisdiction encompassed a dependent rural territory (the tierra). This regulatory capacity of the urban municipality was an important source of conflicts over access and regulation on the commons. The comparative study of these processes in the three areas illustrates the different dynamics of transformation or resilience of commons, in which geographical features were less important than the combinations between different forms and levels of social and institutional inequality. Thus, in the Alcarria and the Sierra de Guadarrama small rural communities controlled the management of commons, with the persistence of relatively egalitarian criteria in the distribution, which limited the process of internal inequality. In the Montes de Toledo the key factor was the existence of a hierarchical asymmetry between the municipality of Toledo, which controlled access to most of the commons, and local communities. Access to the resources was therefore very controversial, with increasing conflicts that jeopardized the sustainability of the commons.
From Sand into Gold and back? The impact of manorial sheep breeding on sand drifts in the sixteenth and seventeenth century Brecklands.
Maïka De Keyzer (Department of History, Utrecht University)

The late medieval Brecklands in Norfolk and Suffolk underwent a fundamental transformation between the fifteenth and sixteenth century. While before the fifteenth century peasant sheep breeding was dominant, by 1600 manorial lords, abbeys and covetous tenant farmers had taken over (Allison, 1957). The traditional and communal fold course system, whereby peasant flocks were granted access to folds on the open fields, was gradually transformed. Lords and their large tenant farmers squeezed peasants out after the demographic crisis of the fourteenth century, after which they changed the formal and informal institutions for collective action. Because of the changing economic conditions, of rising wages, lower grain prices and a lack of small tenants, these lords invested actively in commercial sheep breeding, leading to rising manorial flocks, a gradual change and finally abolition of small tenant’s communal rights, overstocking by manorial flocks and the disappearance of peasant sheep breeding (Bailey, 1990).

At the same time, the Brecklands were the scene of serious sand drifts (Bateman and Godby, 2004). Apart from climatological explanations, sheep breeding and rabbit wardens have been pin-pointed as the main causal factors. The link between societal triggers and sand drifts is however still unclear. Was the transformation of the medieval communal fold course system into the seigneurial and more rigid system, a trigger for more destructive sand drifts or not? What factor of exploitation was most detrimental? Often overexploitation or overstocking is considered as most detrimental, but periods of economic growth and rising pressures, have been discarded as the main cause for environmental distress (Derese et al., 2010). Communal management (Ostrom, 1997; De Moor, 2002, 2009; Van Zanden, 1999), property distribution (Tim Soens, 2009, 2011), social distribution of power and commercial choices (De Keyzer, 2014) have been considered prime movers behind environmental disasters. In this paper, I will dig deeper into the debate and try to analyse which factor, or combination of factors is vital to explain the Breckland sand drifts between the later Middle Ages and the eighteenth century.

Challenging of private property and old custom: an example of gleaning
Jovana Dikovic (Department of Social Anthropology and Cultural Studies, University of Zürich)

The practice of gleaning or second harvest (Nachlesen in German) is linked to the centuries-old custom embedded in common law, whereby the master of the land allows the poor to follow reapers in the field to gather and glean fallen grains for their own needs. The right to glean appeared as mechanism for acquiring social equilibrium when dearth, poverty and landlessness were socially widespread. As an early form of welfare for the needy, still widespread from Biblical Levant to the USA, gleaning should be understood as one of many existing facets of collective property. To be more specific, the right to glean is temporary collective right over private property. It is temporary because it is limited only to a short time after first harvest that belongs to a landowner. Landowner’s explicit or implicit consent is however fundamental in activating this temporary right of the poor.

This paper will investigate the practice of gleaning in Serbian village of Gaj in Vojvodina province that is mainly agricultural. Contemporary practice of gleaning has drifted away from being an informal norm in the past, to a substantively different type of informal behaviour. In
the village of Gaj gleaning is often perceived today as subversive practice and as a euphemism for the field theft. Growing importance of private property and welfare state both on global and local level, created a general perception that the needy are the responsibility of the state and its social institutions. In such an environment landowners in village of Gaj have neither a social nor a political stimulus to support persons in need, transferring their (customary) responsibility for the poor and their well-being to the upper (state-) level. Despite of this, the poor continue to glean (without asking explicit consent from landowner) relaying on old customary rights, and view it as socially justifiable in the absence of other types of access to means of survival. In so doing they challenge contemporary meaning of private property on one hand, and shift customary gleaning into new, individual, one-sided practice on the other hand.
In pre-modern times commons have been a wide-spread form of managing and regulating the use of resources. The papers in this panel explore changing management regimes in the longue durée in four distinct political frameworks in four distinct parts of Europe and the Middle East: the Otto-man Empire, Hungary, Southern Germany and Northern Spain. To do so they focus on the stake-holders in the exploitation of the commons like local users and governmental institutions on sub-ordinate and superordinate levels as well as the conflicts been them. Thus, they expose fault lines between local and imperial forms of knowledge and practices, between local and imperial political and governmental entities, and between long-term and short-term economic interests.

Paper Contributors:

For the Common Good: Regulating the Lake Constance Fisheries, 1350-1800
Michael Zeheter (Institute for History, University of Trier)

During medieval and early modern times the overwhelming majority of Lake Constance was a commons in fishery matters. Although there were private property rights close to the shore, all of the “deep” lake and most of the littoral were open to all inhabitants living in the region. Additionally, only the littoral was under the jurisdiction of the neighbouring principality. The “deep” lake was beyond anyone’s jurisdiction. Yet despite this legal situation, in practice only the professional fishermen had the necessary skills and gear to exploit the resource and make a living from selling their catch on the local markets. Nonetheless, the Lake Constance fisheries were apparently a perfect case for a Tragedy of the Commons: A marketable common resource without legal supervision and clear property rights. However, the fishermen and their authorities managed to preserve the resource for more than four centuries. The key institution for this success was the guilds. In the mid-fourteenth century the burghers took control of the free imperial cities on the shores of Lake Constance, most importantly Constance and Lindau. The several trades including the fishermen formed guilds that regulated them-selves by issuing ordinances. In case of the fisheries they imposed strict rules, such as specifications for gear, closed seasons and minimum lengths. Since fish was a highly perishable commodity and Lindau and Constance had the most important fish markets in the region, both cities could impose those rules on all fishermen wanting to sell their catch there. Thus, they managed to ex-tend their rules on the deep lake and fishermen subject to other principalities. The tool of the fishermen’s ordinance proved so successful that other principalities adopted it despite lacking the framework of guilds. Especially the monasteries of St. Gallen and Reichenau were quick to follow the free imperial cities’ lead. Over the following centuries all four principalities regulated through this tool, although the specifics varied due to local traditions and circumstances. The fishermen’s ordinances – and fisheries treaties between several principalities – were negotiated among the concerned parties and proved to be an efficient
tool that could be adapted to changing social and ecological conditions, ensuring the sustainable exploitation of the resource fish. This expansion and enduring functionality can only be explained by a common interest between fishermen and their authorities. For both, this regulatory regime had clear advantages. The fishermen gained secure access to both the resource and the market, excluding outsiders, thus ensuring a steady income not only for them but also future generations. The authorities could not only extend their influence to areas beyond their jurisdiction, they could also guarantee the culturally important supply of fish to their population. Since both the fishermen and their authorities had a say in the design and alteration of the regulations, they managed to devise and maintain a regulatory framework for a commonly used resource that lasted until the Napoleonic Wars brought an end to the established order.

River Waters Come No More: The Struggle over Wetland Commons in Eighteenth- and Nineteenth-Century Hungary
Robert William Benjamin Gray (University of Winchester)

The control of riparian resources along the Danube and Tisza formed an essential part of rural Hungarian society since the thirteenth century. In a land dominated by water, the reed-beds, water meadows, alluvial forests and side channels that characterized the extensive flood plains of both rivers provided both a vital supplement to the peasants' regular holdings and a significant source of income for their lords. Access to these common resources were regulated by village and estate institutions and governed by a complex mix of localized practice, custom and statute law. However, as the state sought to transform seemingly backward rural institutions in the name of greater efficiency, first under the auspices of the 'enlightened absolutist' rulers in Vienna and subsequently the reformist government in Pest-Buda, local concerns were threatened by the encroaching interests of state and nation. In the eighteenth century, state-led attempts to drain wetlands and improve river navigation threatened the wetland agro-eco system that had sustained a localized, commons-based economy. Then, during the process of emancipation in the nineteenth century, the state sought to adjudicate between the competing interests of former lords and their peasant tenants, both of whom could claim rights to the rivers' resources and adjacent lands under the terms of the new laws. Frequent and prolonged disputes between lords, state officials and the local communities arose where customary rights to common resources were not accounted for sufficiently by the reforms, or where the new landscape created by river regulation threatened long-established patterns of use.

The proposed paper investigates the use and management of riparian resources in the Sárkőz and Gemenc region of southern Hungary - a region that is now celebrated as representative of a surviving, 'traditional' wetland environment. The paper will trace how localized conceptions of com-mon rights developed to reflect local practice, and how these were undermined as the commons were reimagined as state and private property. It will show how competing local (both peasant and seigniorial), regional and national interests were expressed and accounted for in the period surrounding the breakdown of Hungary's old rural order, from the late 18th to the mid-19th centuries. It will reveal how different stakeholders could claim rights to, and thus a say in, the management of common riparian resources, how such claims were justified, and how the conflicts emerging therefrom were resolved. Finally, it will consider whether the case of Sárkőz and Gemenc represented a successful defence of the commons in the past that can offer lessons relevant to present and future environmental management.
Understanding Commons in the Ottoman Middle East – Continuity and Change – 17th-20th centuries
Semih Celik (European University Institute)

As of 21st century, most of the nation states located in post-Ottoman Empire territories, covering a wide area from Southeast Europe to Middle East, do not have well established policies and institutions dealing with environmental problems in general and natural resource and commons management in particular. This is still true despite the recent global consciousness around global warming and climate change that has informed and alerted those states to a certain extent, conceiving the beginnings of institutionalization of natural conservation schemes; a process that goes parallel to the destruction of natural resources and commons as a result of policies of uncontrolled “development.”

This paper will try to understand how as an Empire spread in so vast an area for centuries, the Ottoman Empire tried to cope with environmental problems and attempted at managing its commons within different socio-ecologic and climatic contexts. The “classical” or “premodern” Ottoman Empire employed complex and sophisticated mechanisms for the definition, protection, control and redistribution of commons up until the 19th century. The concepts of commons (şirket-i ibahe) that included right to water (hakk-ı şürb), use of wild forests (cibal-i mübaha), right to wild plants (hüda-yı nabit) and others, was a rather flexible one that has changed meaning and use over time and space. However, this flexibility was based on a long-lasting idea of putting nature above the needs of human-beings and the local knowledge over that of universal. By the first half of the 19th century, this mentality was due to change and commons have in large part become part of commercialized relations of exchange and subject to universal scientific inquiry, eliminating local knowledge. The result was the further devastation of natural resources, and reaction – at times violent – of the local populations, which, all in all, led to a dialectic conflict between the imperial political-ecology and local socio-ecologies in the second half of the century. Out of this dialect conservationist policies have come into being. This paper argues that this dialectic can be a key in understanding today’s problems around commons and natural resource management in the Middle East and South-eastern Europe. By describing, analysing and historicizing Ottoman practices and concepts of regulation of commons in time, this paper will try to put forward possible different ways to look at the challenges that societies and states are facing today in the region.

The presentation is based on my doctoral research, on a wide range of archival material, including legal codices, imperial firmans, petitions, from various archives, but mostly from the Prime Minis-try Ottoman Archives in Istanbul, supported by sources from British National Archives in Kew and newspaper articles from the period. The recently-growing literature on Ottoman environmental history will provide the necessary context and perspective.
resilient cooperation in the exploitation of common resources has however remained however fundamentally static. At this respect, much of the approaches, methodologies and sources employed by most commons scholars have prevented us from obtaining insights on how communities designed and changed the common-property regimes that governed the collective use of their resources. By analysing the regulations produced throughout time by a number of communities in northern Spain where collective exploitation of resources was in place for centuries as well, our work aims at shedding light on the emergence of and change in century-old commons: How did common-property regimes emerge? How did change occur? Which were the main concerns of users when changing the rules of the commons?

Case studies. All the communities analysed in this paper are located in Northern Spain, in the territory of what once was the Kingdom of Navarre. Some communities are located in the valley of Roncal – a Pyrenean valley where climatic and geographical conditions restrict possibilities for economic exploitation almost exclusively to transhumant cattle farming. The situation of the other settlements in the lower valley of the river Ega, where a more sub-Mediterranean climate pre-dominates, allows for a more balanced combination of sheep raising and grain cultivation. Despite such a contrast in the environmental conditions and the productive structure, all the communities are however a clear example of the persistence of formalized cooperation over time. The economic activities that provided them with their livelihood together with the particular features of their environment created strong interdependences both within and between the communities. Since late medieval times, village councils themselves have been responsible for the regulation of cooperation within the communities – with such a self-governance regimes widely documented in the ‘ordenanzas’ or regulations produced throughout time.

Methodology and Results. After identifying these a communities and gathering archival evidence of their regulations, we have systematically analysed these ‘ordenanzas’ in line with the concept of ‘grammar of institutions’ elaborated by Ostrom in her later work (Ostrom 2015). For the purposes of our analysis, we have therefore decomposed each of the chapter of the regulations into their smallest units – what we have called individual rules. Individual rules constitute then our basic unit of analysis. All the identified individual rules have been codified according to a number of categories pre-defined in a codebook. In this paper we present an analysis of the content of such rules as well as the change in the content of the regulations over time. Preliminary answers to questions of which were the main concerns of commoners when regulating cooperation, how they developed over time, and which was the relationship of these changes with the underlying environmental and economic conditions of the communities are finally suggested.
# B15 - Switzerland as a laboratory for governance innovations in the management of CPRs - historical approaches
Friday 13 May 2016, 13.00-15.00, Main Building, Room 331

Panel Convenor:

Martin Stuber (Institute of History, University of Bern)

Among currently active common property institutions in Switzerland the diversity is considerably high and rise international interest in the Swiss Way of governing common pool resources (CPRs such as pasture, water and forestry). In his classical publication from 1879, August v. Miaskowski states that Switzerland with its diversity (including political decentralization and participation) can be seen as a laboratory for governance innovations in the management of CPRs. That issue of laboratory can also be related to the work of Robert Netting on pasture and water management in Törbel (Valais), influencing Elinor Ostrom’s design principles for the sustainable institutions for CPR management and newer work dealing with the sense of ownership of bottom-up institution building processes for the commons (constitutionality) also refers to the conditions of innovations which is found in the Swiss decentralised and participatory political system (Haller et al 2015).

In the context of modern public administration the robustness of the commons linked to civic corporations («Bürgergemeinden») and corporations («Korporationen») can only be explained by having a historical analysis in the longue durée. In this panel we will ask, how these systems remain robust and how they adapt, endure or are newly crafted under the pressure of economic or political change over the last three centuries.

The long-term utilisation of the collective resources has to be analysed in the context of changing «energy ages» (Pfister / Egli 1998): The agrarian society which was most of all based on solar energy (until 1850), the industrial society which was based on coal imports after the country had been connected to the railway network (1850-1950), the consumption society which was characterised by mass consumption and mass motorisation based on the global availability of mineral oil (after 1950). How was collective agriculture affected by the changed economic significance of the analysed resources in the course of these three ages? How did resource users adapt the common property institutions in order to react to these changes? Where could the observed practices be located in the context of today’s concept of sustainability with its ecologic, economic and social dimensions?

Additionally, one will also have to ask in which ways institutions and resource management were affected by the political dynamics during the period under analysis – from the Ancien Régime to the period of transition into the constitutional and federal state which started with the Helvetic period. How did the pre-modern institutions succeed with adjusting to the modern constitutional state? How did they adjust their collective use of resources to the changed political environment, or how – vice versa – did they influence it? And how are the political changes related to those of the energy system?
“Untere Gemeinde” and “Obere Gemeinde” – Common property institutions in the city of Berne in the transition from the Ancien Régime into the liberal constitutional state
Sarah Baumgartner (Institute of History, University of Bern)

The city of Berne’s commons, comprising fields and pastures («Stadtfelder») and forests («Stadtwälder») date back to the town’s origins in the Middle Ages. Originally, each inhabitant household had the right to a certain amount of wood from the forests and was allowed to cultivate some grain on a plot in the fields for their self-supply; but quite soon, the access was more and more restricted. This paper will show how these resources were used in the long term, until the end of the agrarian society in the mid-19th century. By doing this, avoiding the adaptations due to fundamental changes in the energetic system, it will be possible to show how demographic, economic and political developments led to alterations in the use of these natural resources.

The main questions to be raised will be those of the legislation organizing the use of this common property, the actors involved there and finally its productivity and capability to provide the city with wood, cereals and milk. Some characteristic features need to be considered in particular: First, the city as well as the surrounding fields were divided in two parts, «Untenaus» and «Obenaus», unequal in population and area, resulting in much less land available for the families in the «Obenaus» part. How was the access organized under these different conditions? Second, until the end of the 18th century, only a small proportion of the population, the city’s burghers, were allowed to participate in the use of this common property. After the revolution, they lost this privilege, but instead received the yields from the auctions, now open to everybody, where the right to cultivate a parcel of land was sold. Who was once, who later on using this land, which for (as there were no restrictions concerning the crops any more)?

In this way, an insight in the early history of Switzerland’s today largest civic corporation will give an example how such a common property institution functioned and was adapted to changing circumstances, under the basic conditions of the agrarian society.

The Commons over time in highland and lowland Switzerland: diversity in their size, management accessibility and even survival (16th-21th c.)
Anne-Lise Head-König (Department of Economics, University of Geneva)

My paper will focus on the changes which occurred in the use of the common land since the 16th century and on the controversies which arose in the course of the 19th century when state institutions – mainly cantonal governments – tried to implement a change of policy with regard to the allocation of the resources this type of land generated. So-called communal dualism was the source of ever-increasing political and economic tensions.

Management of common pool resources in a high altitude alpine environment: Ursern Valley, 1900-2000
Martin Schaffner (Department of History, University of Basel)

Land as a common pool resource in Ursern Valley (south to San Gottardo pass) has a history going back to 1300, when settlers were granted rights and privileges by the feudal landlord.
Three characteristics have been shaping land use in Ursern ever since: the common ownership of the pastures, an elaborate set of rules regulating the use of the common pool resources, and the management of the land through procedures that include collective decision making. Records from the Middle Ages to the present testify to the continuous efforts of the collective land owner to safe-guard the productive potential of the land for future generations. The paper deals with the changes in land use during the 20th century, when the system increasingly got under pressure, showing signs of strain, and trying to adapt to changing external conditions.

**Transformation of common fields in building land since the mid-19th century – the financial origins of the richest civic corporation of Switzerland**

Martin Stuber (Institute of History, University of Bern)

My paper will focus on the example of the civic corporation of Bern («Burgergemeinde»), and shows how the political and economic position of her common pool resources changed fundamentally, when the society transformed the energetic system. In the agrarian society (before 1850) the civic corporation earned their income mainly from rents («Pachtzinsen») and distributed the annual revenue exclusively under her members («Burgernutzen»). In the industrial society (1850–1950) the civic corporation transformed their common fields in building land by investing in transport infrastructure (bridges, railway). The rising income was used as a general funding available for culture and science. In the consumption society (after 1950) the civic corporation followed the principle of onion rings: on the one hand she sold repeatedly the city surrounding common fields as building land, on the other hand she acquired city distant soil as future building land.

**Alpine corporations in Grindelwald – their important social function in the use and preservation of the Alps for a sustainable development**

Marianne Tiefenbach (IKAÖ, University of Bern)

In Switzerland, with an alp-surface of 500'000 hectares and about 1550 alpine farms with 60'000 cows grazing for 100 days, the alpine cooperatives and societies are of a considerable economic and cultural importance. For centuries the alpine meadows in the Bernese Oberland have been pastured by cattle, and this cultivation has been of existential importance to the alpine agriculture. The landscape is shaped by the classic stages of winter stables with hay feeding, spring grazing and alpine summer grazing. The corporations create a most welcome side product for our society. It will be of great importance for the sustainability of the alpine landscape to find a balance between agricultural added value and appreciation of the landscape.

In Grindelwald – alpine corporations are old traditional local institutions which are involved in different local, regional and global processes. The ruling order, called «Taleinung», was mentioned for the first time in 1404 («Taleinungsbrief» 1538). For all seven alpine corporations, rights, obligations and distribution of natural resources are written down in this «Taleinungsbrief». A middle-age traditional institution in modern time, how is this possible? Which kind of local resources are responsible in that case? Which institutional design is of high importance for alpine cooperatives, their cultivation and the sustainability of the alpine landscape?

In the context of modern society, alpine cooperatives like the «Bergschaften» in Grindelwald are characterised by different aspects. The quality and quantity of resources of the commons are based on a long historical institution. The direct involvement of the users of the commons
as well as the taking into consideration of their interests increases the probability of institutions being well matched with the local, economic and cultural context. In which way the alpine cooperatives have adjusted and developed their dimension to modern times within the present agrarian context is a central question in view of their future.
# B16 - Constitutionality and bottom-up institution building processes: lessons from Europe

Wednesday 11 May 2016, 11.00-13.00, Hallerstrasse 6, Room 203

Panel Convenors:

Ramez Eid (Sakhnin College, the Technion Israel)
Gabriela Landolt (Institute of Social Anthropology, University of Bern)

This panel outlines the recently proposed approach for analysing bottom-up institution building processes, with a special focus on new legal forms and collective action linked with local views on and local motivation for crafting institutions. There seems to be an important gap in the literature on institution building with regard to local perceptions of common pool resource management (Ostrom pers. com in Zurich 2011). Ostrom’s work highlights the way successful institutions work and which aspects are important for their success (Ostrom 1990, 2005; Poteete, Jansen and Ostrom 2010). Others such as Ensminger have highlighted the role that the bargaining power of actors and ideology play in the institution-building process (see Ensminger 1992, 1998; Haller [Ed] 2010). However, there is very little research on how local actors themselves view (i.e. emic) an institution-building process in retrospective. The new approach which was first based on partially successful case studies of bottom-up building processes (by-laws for fisheries in Zambia; and local conventions for pasture and forestry in Mali) was proposed by Haller et al (2015), stemming from real cases of recent self-driven institution building. Additional case studies from Spain, Israel, and Switzerland, in which emic views become apparent in several new legal forms such as by-laws and conventions that are based on local participation will be discussed in accordance to such self-driven processes of “constitutionality”, which we see as a conscious process of institution building from below, and which does not suffer from the drawbacks of top-down imposed processes of democratisation, decentralisation and participation, which are often subject to processes of elite capture. Contesting the view that subjects internalise governmentally imposed frames of viewing the world by ‘participating’ in institutions (see Agrawal 2005), this perspective emphasises instead how local actors construct a sense of ownership in the institution-building process that can take new more formalized form such as conventions and by-laws. What are the conditions from a local view for such successful institution building cases? As a basis, we use theory of practice, actor-oriented approaches and a variant of the New Institutionalism approach in social anthropology. This approach incorporates power and heterogeneous group interest, and the theory of social learning. The panel should make us understand from a local perspective why and how constitutionality works, even in politically heterogeneous settings. The panel focuses on European cases of Constitutionality in which the rule of law and democratic participation is often stronger than in the Global South, however with significant differences, such as cases from Spain, Switzerland and other countries will show.
Paper Contributors:

**Constitutionality in Mallorca: the case against environmental corruption**
Ramez Eid (Sakhnin College, the Technion Israel)

This paper presents the perception of bottom-up process for crafting of institutions for the sustainable management of natural resources. This specific project investigates and analyses the different experiences and local actors’ perception in a protected area in the western Mediterranean (Serra de Tramuntana in Mallorca, Spain) in crafting new local institutions of participatory conservation and resource management. These options are the result of the UNESCO declaration that these protected areas have “universal” social and natural values, and must be protected according to principles of sustainability - the natural ecosystem is given protection along with measured considerations for local human needs. This has been, historically, a politically and economically marginalized peasant community, speaking the local Mallorquin language. The case is very interesting due to the recent change in policies for sustainable development, “forced” upon the government by a long bottom-up process. In addition, the general distrust for the government acts and its neo-liberal development policies, and due to many corruption cases during the last 15 years, have all fostered a discourse of how ineffective and destructive the state operates, finally contributing to the creation of these new social and political bottom-up dynamics. In this political context approaches such as the UNESCO Biosphere reserve provide an opportunity for legitimate local collective action. The paper explores how this is made possible from the perspective of local people and how they depict this process of constitutionality by bringing in their ideas of sustainable forest and environmental management, and at the same time using more democratic strategies and structures to foster a sense of belonging and trust among all stakeholders involved in the process. For such, the paper argues for a real local-level grassroots democracy as a tool to bring all local interests on the table, and thus creating a better sustainable resource management institutions.

**Constitutionality and Identity: Bottom-up Institution Building and Identity among Coastal Sami People in northern Norway**
Angelika Lätsch (Institute of Social Anthropology, University of Bern)

The Sami are an indigenous people of Scandinavia and the Kola-Peninsula in north-western Russia with roots in prehistory of large parts of the region. They have lived in their own small-scale societies and have become diversified in terms of different (but not mutually exclusive) livelihoods of fishing, hunting, trapping, animal husbandry, farming, and reindeer-herding. The Sami people were victims of a forced assimilation policy by the Norwegian state via national standardization: accommodation, education, nutrition and health care were characterized by the government’s notion of equality, in which every citizen, Sami or Norwegian, should have the same opportunities. Additionally, newly established economic structures gradually led to the integration of the Coastal Sami into the national economy, thereby causing their invisibility as a distinct group for a long time. The conflict over the damming of the Alta river during the 1980s is interpreted as the turning point of the relationship between the Sami people and the Norwegian government, resulting in the so-called Sami-paragraph of the Norwegian Constitution, guaranteeing that the Sami in Norway, the status of an indigenous people by ratifying the ILO-Convention 169 and the establishment of the Sami Assembly. Whereas the reindeer-herding Sami were able to (involuntarily) dominate public discourses as the ‘real
Sami’, traditional Sami fishermen were marginalized and invisible as indigenous group as not being distinct from other small-scale fishermen. This paper describes how Coastal Sami regained their identity via conflicts over reduced access to fisheries. This common pool resource previously managed in a common property regime in fjords and at the coast was later on claimed to be state property to be used commercially. Introducing technical change and promote modernization and industrialization, the Norwegian authorities contributed to a process of overcapitalization and overuse of fish stocks. The state reacted to this depletion with an individual quota system in cod fisheries, trying to reduce the pressure. The quota system led to fishing rights being concentrated in fewer hands, at the expense of Coastal Sami who faced the Tragedy of the Commons. As a reaction, some fishermen with Sami origin started to act collectively partly in self-established local organization, using channels of the Sami Assembly to regain ethnic identity in order to boost their bargaining power. This unfolds three new insights to constitutionality: First, succeeding in contestations over a higher quota was perceived as being much easier by reinstalling a new indigenous political identity that provided justified access to the fisheries; second it contributed to the establishment of bottom-up institution building as Sami were able to discuss regulations of fisheries in their area; third, it served as the basis for the re-established Sami identity different from other small-scale fishermen as reflection of their past. This is a novel aspect in the discussion of constitutionality as this process is not only about local participation based on a sense of ownership of the institution building process but goes further and includes the role recreation of identity plays in the manage local resources.

Envisioning slow paths as a landed commons in Flanders
Matthias Bussels (Department of Architecture, KU Leuven)
Pieter Van den Broeck (Department of Architecture, KU Leuven)

Flanders’ environmental reports indicate that the region suffers from a 27% build-up of land – a statistic that is only expected to increase. Such an increase generates pressure on the remaining open space (agricultural fields, meadows, dunes, forests...), engenders fragmentation of land and hinders governance practices that intend to stimulate the enjoyment of land’s diverse amenities for a wider public (Verachtert and Van den Broeck 2015). The financial and economic crisis furthermore weakened the capacity of public authorities to take up their expected roles in that regard, as it has severely cut public budgets and instigated a variety of reforms at the legal and administrative level. This paper illustrates such developments by looking at the slow paths to the south of the city of Antwerp as a lever for developing community-based land tenure and governance systems – called ‘landed commons’. The leading research questions are: “can slow paths be understood as a landed commons?”, and if so: “which responsibilities are taken up by the community, why, and how can and should the emerging governance system be further enhanced?” The focus throughout the analysis is on the multiplicity of formal and informal institutions that structure the (non-)actions of the various actors involved in the process. Understanding those, allows for a nuanced and detailed understanding of the way land use (rights) are structured in Flanders, and may facilitate proactive strategies to stimulate the proliferation of landed commons. The analysis builds upon an analytical framework developed by the INDIGO research programme, called the Théorie des Cité + (Bussels, Van den Broeck and Moulaert 2015), which is modelled on the Théorie des Cités by Boltanski and Thévenot (1991). The framework examines how the various actors’ interests converge and how socio-institutional logics, (inter)personal socio-psychological factors and situational psycho-political constructs (conceptualized as cités) combine to shape
the building of landed commons, i.e. the form, use, location... of slow paths. The interplay of those three tracks, when coupled to a list of principles defining the landed commons, revealed how, at the level of the case of a single stretch of slow path, an embryonic landed commons has emerged.

**Swiss alpine pastures as common property: Success story of bottom-up institution building in Sumvitg, Canton of Grisons**

Gabriela Landolt (Institute of Social Anthropology, University of Bern)

Alpine pastures cover one third of all agricultural land in Switzerland. Depending on the region’s natural and cultural characteristics different property rights systems have evolved ranging from private property to common property. The majority of the alpine pasture land is held as common property owned by a well-defined group or a commune, and used and managed by community based institutions such as corporations or cooperatives (Werthemann and Imboden 1982). In the Canton of Grisons, around 80% of the alpine pastures are managed as common property, and 60% of those pastures are owned by communes (LBBZ 2007). The commune is the lowest governmental entity in Switzerland, and is, as owner of alpine summer pastures, responsible for maintaining the common property resource (CPR) and to allocate it to its farming population as prescribed by cantonal law. However, the management and use of the alpine pastures and related infrastructure, have been in the hands of farmer’s corporations (Korporation or Genossenschaft) and cooperatives (Kooperative) for centuries, which are recognized as legal entities under civil law.

Based on anthropological research, the CPR regime in Sumvitg, a mountain village in the Canton of Grisons of Switzerland, is presented, which succeeded in upholding its common property management system over a long period of time. Following the written regulations since 1800 it becomes clear that the farmers and users of the CPR were willing and able to adjust their management to social, economic, legal, and political changes in order to maintain the primary function of the alpine pastures, namely to enlarge the fodder base provided by the privately owned or rented meadows in the valley by the collectively used alpine pastures. The persistence of the CPR system over centuries suggests that the CPR institution is robust (Ostrom 1990), in the sense that it has proved institutional flexibility, to be able to cope with internal and external disturbances while maintaining its performance (see Fleischmann et al. 2010, p. 10). However, the policy changes (direct payment system), the market pressure (shifts in relative prices) and the structural adjustments (specialization, intensification, rationalization of farming) of the last 50 years have trans-formed the environment, in which the CPR institution has to operate, in a faster and profounder way than ever before. With the words of Bundi and Rathgeb (2003, p. 98) the local political institutions have become an “uncertain bastion of reaction”.

The objective of the presentation is to describe the accelerated “production” of disturbances on the higher institutional levels that challenge the local CPR institution in Sumvitg and to contrast them with a local institutional history, a tradition of rule constitution, decision making, communication, interaction, and leadership that manages to turn the “uncertain bastion of reaction” into a “certain bastion of reaction”.

Theoretical approaches such as the model of institutional change by Jean Ensminger (1992) and constitutionality (Haller et al. 2015) help to conceptualize the key factors for explaining the successful collective action among the farmers in Sumvitg.
We contrast two different discourses on urban governance: participation and self-organized collective action. Both address the interaction of citizens and government, albeit from different perspectives: on the one hand from the viewpoint of the government, selectively handing some of its power over to citizens, on the other hand from citizens who self-organize for a collective management of urban commons. We will show for the example of the Austrian city of Korneuburg that the collective action literature may help to overcome some of the self-criticisms and shortcomings of the participation discourse.

The participation of citizens in urban decision-making processes is expected to increase legitimacy, quality and acceptance of decisions, efficacy of their implementation and to foster empowerment and education of citizens. Generally acknowledging participation as essential for sustainability on local level, various studies point at shortcomings and disappointing results, which they i.a. trace back to the fact that control usually remains by public government and neglect the chance of dynamics of civil society itself. Thus, citizen involvement is widely implemented project-related only, given that the problem at hand is pre-defined by governmental actors, inviting citizens to collaborate on case-related solution finding. Citizens themselves usually are neither empowered to prompt participatory processes themselves nor are they involved in negotiation processes regarding problem definition or long-term processes of institutional change. With her pioneering work, the ladder of citizen participation, Arnstein (1969) offered a typology of citizen participation reduced to the question of power-distribution, illustrating the extent of citizens’ decision-making power as hierarchical rungs. Since then, understandings of how to govern a city have undergone fundamental discussions. Several recent research works thus question the power-related model of participation as it restricts processes regarding problem definition and space for negotiation, impedes transformation of existing dominant frameworks and probably fails to “capture the types of community-based action and government-community partnership”.

Our paper critically discusses how recent scientific works on urban commons and collective action can contribute to a conceptual evolution of participation and builds a bridge between participation, self-organisation and collective action. We draw on experiences of a case study in the city of Korneuburg, which runs an inclusive urban development process since 2012, going far beyond traditional levels of citizen participation, institutionalizing a self-governing group of citizens, political and administrative representatives, with their own rules of social boundaries and decision making and with general acknowledgement by the city government. Furthermore a "charter for citizen participation" defines rules for future interaction between citizens and government, giving the citizens a more active role in co-design of the urban future.
Policy analysts are often victims of the biased view that CPR institutions are a relic of the past condemned to disappear in the context of today’s public policies. This is due to a presumed loss of functionality by such institutions, which suffer from competition with modern states, whose policies have shifted resource management responsibilities to higher decisional levels, resulting in less room to manoeuvre for local property rights holders, in particular CPR institutions.

In a world organized in nation states – even if these states are “weak” –, the perpetuation of local CPR institutions need often to be understood in connection with the role played by higher levels of organization. Although it appears difficult in some cases to find any formal traces of state intervention, it must nevertheless be admitted that self-organization is often made possible because of the “shadow of hierarchy” (Scharpf 1994). As Bratton (1989) puts it, the state “may be incompletely formed, weak, and retreating, but it is not going to wither away”.

This panel aims to open the black box of Ostrom’s 8th design principle focusing on embedded regimes, i.e. on the necessity to “build responsibility for governing the common resource in nested tiers from the lowest level up to the entire interconnected system.” Indeed repeated empirical observations focusing on the regulation processes associated with several natural resources stressed the specific role played by CPR institutions, which have survived in many cases, despite the predictions of their inevitable demise. Thus, it would appear that some CPR institutions have managed to adapt to the economic, technological, social, political, and institutional changes that have affected the development of central states over the past century.

This panel aims to address the following questions: (1) What role do CPR institutions play within the implementation process of natural resource management policies? (2) What are the conditions of the perpetuation of CPR institutions within countries characterized by a growing density of policy regulations and an exclusive property rights regime? (3) What are the advantages and disadvantages of political-legal arrangements involving CPR institutions in the implementation of sustainable resource management policies?

Paper Contributors:

**New Commons for the Redistribution of the Profits of Large-scale Land Acquisitions**
Jean-David Gerber (Institute of Geography, University of Bern)

Large-scale land acquisitions (LSLA) lead to the expansion of private forms of land tenure in countries where access to land was often governed by non-exclusive forms of land rights such as com-mons or public property. In this paper, we argue that LSLA are more than a form of land privatization: LSLA lead to a (partial) appropriation the local regional development processes.
LSLA are vehicles used by supra-regional actors (including the state or international donor organizations) to inject new ideologies into the local social fabric and promote local development. As such they are expected to have a catalytic effect leading to the conversion of some kinds of re-sources (mainly commons such as land and water) into others (mainly monetary resources and infrastructures). However the catalytic conversion is mostly far from perfect: while some actors are able to benefit from the new resources, many do not have access to them, while simultaneously losing access to the original ones. We formulate the broad research hypothesis that the negative impacts of LSLA on the local population can be attenuated if the catalytic effect of LSLA can lead to the creation of new forms of common pool resources.

Relying on three case studies from Ghana, Peru and Morocco, we show that the rules accompanying the catalytic conversion are central elements explaining the local redistributive effects of LSLA in regional development. In Ghana, the newly created resources were mostly appropriated by local elites and by the investors. In Peru, despite the overall asymmetric distribution of benefits, the new setting resulting from LSLA-friendly measures lead to the creation of public infrastructures that made it possible for specific small-scale farmers to gain access to international markets. And in Morocco, targeted measures by the state to protect local actors from predatory investors made it possible, to some extent, to share the benefit of economic growth.

We analyse the changing governance structure at the local level and highlights the institutional dimensions leading to potentially better redistributive effects of large scale investment projects at the local level.

Grassroots mobilization for claiming collective state-mediated property rights and nature conservation in an army-owned estate in Guatemala
José Pablo Prado Córdova (Central European University, Hungary)
Wilder Hernández (Protected Areas Technician, Guatemala)

The Guatemalan System of Protected Areas –SIGAP– includes over 300 conservation units belonging in several categories and degrees of intervention, and covers nearly 30% of the 108,889 km2 of a megadiverse national territory. Yet for the first time a peripheral urban community located in the municipality of Villa Nueva by the name of Ciudad Peronia took the initiative of requesting that nearby army-owned estate of San José Buena Vista were turned into a natural park for safeguarding ecological processes and thus securing human life quality. This action prompted an underway process of devising a new management category adequate for this novel scenario led by the National Council of Protected Areas –CONAP– which has triggered a number of local-scale environmental awareness initiatives. Such a process of devolution turns out to be particularly striking in a country where armed forces have previously been accused of severe human rights violations thus suggesting that grass-root mobilization addressed to interrogate national authorities has improved its leverage vis-à-vis current power relations. Of particular relevance for this case is the recent so-called Guatemalan spring that entailed an unprecedented shift in domestic politics and citizen involvement. Critical theory, however, suggests that seeming breakthroughs in state-civil society relations might indeed be subtle co-optation strategies ultimately weakening social movements. This paper seeks to answer the following questions: (i) to what extent is this transfer of property rights a legitimate social success given the particulars of context and history?; (ii) how are power structures being questioned by citizen mobilization to transcend a sheer inherent transgression presumably
providing legitimacy to the status quo?; and (iii) what kind of narrative prevails so far in the
devising of the new management category sought for in San José Buena Vista?

The Power State Conundrum: The Encounter between Global Demand, Local Users and
the State in Early Modern Northern Scandinavia.
Jesper Larsson (Division of Agrarian History, Swedish University of Agricultural Sciences)

The seventeenth century has been labelled as the dawn of the global world (Brook 2008). During this period in Scandinavia the power state developed almost complete authority over society (Jespersen 2000). Never the less, in Northern Scandinavia a more intense use of commons took place that was depended on self-governing. This paper discusses the encounter between the global (European) market, the power state and self-governing of commons in upland Scandinavia. It will use three different settings and geographical areas as examples; 1) a transhumance system in central Sweden; 2) a tar distillation economy in Ostrobothnia; 3) and Sami reindeer nomadism in Lapponia.

Two aspects will be discussed in depth:
First the rapid development of the utilization of the commons will be discussed in the light of push and pull factors. The pull factors were a global demand for commodities from Northern Scandinavia such as copper, iron, tar and meat, but also how Northern Scandinavia became of greater geo-political interest for states. The push factors involved a cooler climate, the power state’s demand for taxes and conscription of men for warfare. In the Sami area the state created four different arenas for different purposes for the encounter between the state and local users: taxation, market, church and court. It was a way to gain control but it also facilitated an increased production and trade.

Secondly to be discussed is “the power state conundrum”; how the state developed almost complete authority over society while at the same time facilitating self-governing of many natural re-sources. The increased use of commons sparked a rapid development of institutions for self-governing and many conflicts concerning management emerged. A goal for the power state was to establish social stability and one way to do that was to be a mediator in conflicts emerging among local actors over use of natural resources. The local court was the main arena for encounter between state and local users regarding these disputes and the courts developed strategies for conflicts resolutions regarding commons.

However, the global market did not only create a demand for commodities from Northern Scandinavia. Northern Scandinavian’s come to develop a desire for global products. At summer farms and goahtis (sami cots) people became addicted to drinking coffee and smoking tobacco in clay pipes. In that sense even the most remote outpost became part of a “glocal” world.

Moroccan regeneration: Government land deal as a catalytic converter for social
development
Sarah Ryser (Institute of Social Anthropology, University of Bern)

The Moroccan agency for solar energy MASEN is building the biggest Solar-Energy-Project world-wide through a public-private partnership. This project has a surface of more than 3000 ha and is situated in the Ghessate rural council area, 10 km away from Ouarzazate, on communal land previously owned by the Aït Ougrour ethnic community, a Moroccan Berber Amazight Clan.

This paper analyses the impact of the investment on the local population. It highlights the changes in local resource uses that took place after the acquisition of the land by the investor.
While the access to some resources has become restricted (land, water), new resources were created (fund resulting from the sale of the land, compensation fund provided by MASEN, “fruits of the growth”). In this context, the overarching question of this article focuses on the wins and losses that result from such an investment for the local population with a special focus on the emic perception of local actors at the household level. Which impacts did the investment have on local institutional arrangements? Which forms of redistribution took place? Who benefits from it and who loses?

The overarching hypothesis of the article is that the investment plays the role of a catalyst: it leads to the transformation of some natural resources into new monetary resources that local actors can tap, under specific conditions, to sustain their livelihood.

Among the different actors concerned by the project, this paper focuses on two main categories of local actors:

a) Herders who used the 3000 ha as a passage for transhumance are strongly concerned with the new utilization of the territory. Even if it is not a desirable location for extending pasture, it is not what is commonly called “wasteland”. Following the establishment of the project and the lack of access to the land for transhumance, local community members, who once used the land for this purpose, have to seek alternative options.

b) Local community members who do not have access to jobs, have no related benefits in the short-term. They will be looking for alternative means of subsistence and a coping strategy such as involvement in government development programmes (i.e. participation in cooperative, “Ma-roc vert” and “INDH” etc.). Through these programmes, local community members are able to earn money whilst at the same time be empowered through information, awareness, government support and easy access to economic and social amenities including health facilities, education, promotion of local ‘ware’ or product market, and thereby reduce losses arising from the LSLA project.

Based on field data collected at the end of 2015, this research presents preliminary findings to answer these questions also integrating a gender perspective. It will illustrate for each of the different actors the direct and indirect benefits and/or losses related to the Solar-Energy-Project, in which several international banks as well as development agencies and technical companies from Germany and elsewhere are involved.

**Multiple Meanings of Forest Commons: producing laws and policies in the Romania**

Monica Vasile (Institute of Sociology, Humboldt University)

The paper brings in-depth data from the Romanian Carpathians to shed light on processes of changing forestland tenure, and to draw attention to a set of practical and legal mechanisms set up for the framing and management of commons, which could lay grounds for forest grabbing by foreign enterprises. By connecting the working of actors at different levels, such as community-based institutions, logging companies and government officials, the paper dives into the arena of negotiating the fabrication of legal and practical instruments for possessing, expropriating, or challenging land controls. It delves into the political and legal attempts to liberalize the market of forest commons, by changing laws and denying customary rules, in ways often deemed locally as “corrupt”. Emphasis is put on competing meanings of forests for different local and state actors, put forward in narratives and action. In this sense, it is revealed how the forest commons can be framed on the one hand as a commodity, to be produced and marketed in a liberal regime of property; and, on the other hand, they can be framed as a social and “cultural” asset, a reservoir of livelihoods, with both economic and affective significance.
for local dwellers. Furthermore, the paper brings comparisons with forestland grabbing processes occurred one hundred years ago.
# B18 - Analysis of collective action in payment for ecosystem services contexts

Friday 13 May 2016, 15.30-17.30, Main Building, Room 304

Panel Convenors:

Stefanie Engel (Institute of Environmental Systems Research, Osnabrück University)
Roland Olschewski (Swiss Federal Institute of Forest, Snow and Landscape Research)
Sergio Villamayor-Tomas (Swiss Federal Institute of Forest, Snow and Landscape Research)

Payments for ecosystem services (PES) have become a popular approach in addressing environmental degradation in Europe. This has been particularly the case in the agricultural sector. Payments for conservation agriculture in the EU (also called Agro Environmental Schemes) amounted to €22 billion of the Union’s 2007-2013 budget. The European Commission spent €3.23 billion on AES in 2012, a figure two orders of magnitude higher than the cost of managing Natura 2000 sites. Given these figures it is important to understand the conditions under which farmers are willing to participate in AES programs, and more specifically, the role that collective action dynamics play in those decisions.

Some scholars argue that PES should be seen as institutions for collective action rather than just economic incentives. At last three reasons motivate this view. First, the effectiveness of many conservation practices strongly depends on threshold and agglomeration effects. In some cases the practices are only effective if they are applied by a minimum number of resource users (see, for example, biological pest control practices). In other cases the practices need to follow certain spatial configurations (see, for example, practices contributing to the creation and/or maintenance of ecological corridors in the agricultural and forestry sectors). Second, some environmental outcomes can only be measured at aggregate level, implying that payments are made conditional on collective outcomes. Third, where resources are owned jointly or managed by groups of users, payments to groups imply collective action dilemma for the group members. Our knowledge about how PES design and contextual factors influence the behaviour of resource users (e.g., their willingness to participate in PES, coordinate, comply with the practices) in such settings is rather rudimentary.

Looking at PES from a collective action and institutional approach, entails understanding soil and water-related Ecosystem Services as commons in different degrees, paying attention to the associated social dilemmas (e.g., provision and coordination problems) that resource users face in the implementation of resource conservation practices, and recognizing the role that institutions can play in aggravating or overcoming those dilemmas. The theory of the commons may be useful to better understand cooperation in PES contexts; however, a straightforward application of the theory may not be entirely appropriate or sufficient. The theory has proven great value to explain the sustainability of self-organized common property regimes for the management of common pool resources at local levels. Although PES can be implemented in those contexts, they can be also used in many other contexts. Furthermore, the introduction of PES may affect pro-social preferences and thereby cooperation.

Some of the questions to drive the panel are: To what extent do different design attributes of PES influence collective action in the implementation of environmental conservation practices? Which institutional factors contribute to the success of group PES? To which extent can PES influence pro-social behaviour and long-term collective action dynamics? To what degree can the theory of the commons help us to understand the success of PES in local contexts? How is the PES context different from the situations usually addressed by the theory of the commons?
To what extent can methods applied by commons scholars be used to better understand collective action dynamics in PES contexts?

Paper Contributions:

Payment for watershed services and the management of the commons: between ‘privatization’ and ‘publicization’ of space and resources
Patrick Bottazzi (School of Environment, Natural Resources and Geography, University of Bangor)

Payment for watershed services (PWS) are quite recent incentives aiming at reconciling environ-mental stewardship with locally-based livelihood necessities. Governance structures and natural resource property rights are key factors to understand the way PWS are implemented locally. PWS are often considered as ‘market-likely approaches’ because of the high potential for water re-sources commodification and have been criticized for the risk that such scheme can involve on the traditional management of the commons. However, PWS are never landing in an institutional desert but are subject to a process of local appropriation conducing to the transformation of the initial design depending on individual and collective action strategies of the most concerned land users. The processes during which PWS are concretely implemented are influenced by a mixt of negotiated individual and collective interests during which several factors can appear contradictory: 1. A risk of land and resource privatization triggered by a perceived necessity to ‘clarify’ and ‘simplify’ the management of the commons. 2. The emergence of a new ‘public awareness’ but also new individual motivations due to the (re-)valuation of ecosystem services produced by watershed ecosystems. 3. A reconfiguration of the multi-level governance structures in which individuals, considered as service providers and land owners, are playing a prominent role in the management of the commons. One hypothesis is to say that individual motivations in PWS enrolment are not incompatible with the concerns of environmental stewardship for the provision of communal or global ecosystem services. In many cases land users are also benefitting directly or indirectly from the provision of global ecosystem services. Our research introduce the concept of ‘environmental self-service’ who define the strategy developed by some land users or so called ‘service providers’ to orient their conservation practi-ces in a way that they can directly or indirectly receive an environmental benefit from them. By extension the concept includes the mobilization by the service providers’ community of a set of endogenous norms, rules and institutions that effectively enable the appropriation of a PES scheme based on community shared or contested values and perceptions about sustainable management and the collective benefits of ecosystem services. We will illustrate our talk by providing insights from a recent case study of Payment for Watershed Services (PWS) aiming at connecting ecosystem service users (Municipal Government, Water Cooperatives and downstream villages) with services providers (Upstream farmers and cattle-ranchers). Partially funded by the European Union and implemented in Bolivia by a national NGO, the scheme is an innovative approach called Acuerdos Reciprocos por Agua (ARA) (Water-shed Reciprocal Agreement). Its originality is based on an in kind contribution (beehives, fruit seedlings, irrigation tubing, barbed wire and other similar products) paid by the ES buyer to the ES provider ranging from $1 to 10/year/hectare. The aim is to support farmers reducing the impact of unsustainable agriculture practices on watershed ecosystems.
Can collective conditionality improve agri-environmental contracts? Insights from experimental economics
Philippe Le Coent (University of Montpellier)

Traditional agri-environmental contracts, action-based voluntary and individual, have not succeeded in meeting the environmental targets set in the European Common Agricultural Policy, despite the large amounts dedicated to their implementation. One of the main reasons for this unsatisfying outcome is the limited and scattered adoption of contracts and the existence of threshold environmental effects. We use a threshold public good experiment to test an agri-environmental contract with a collective conditionality, a new form of contract in which farmers are paid only if the environment production threshold is collectively attained, a sort of collective result-based contract. Our experimental results show that conditional agri-environmental contracts are more efficient than the traditional ones and improve the environmental outcome. We also highlight that early stages of implementation of such mechanism is fundamental for its success and that risk aversion can limit its effectiveness, suggesting the importance of accompanying its introduction with facilitation activities. We conclude that this new form of contracts should be considered in the design of future agri-environmental policies.

Which policy instruments for a more sustainable management of cultivated peat soils in Switzerland? A computerized framed experiment
Marie Ferré (Swiss Federal Institute of Technology Zurich)

Cultivated peatlands represent 0.3 percent of the world’s land cover but emit 6 percent of global CO2 emissions. In Switzerland, many low peat lands are drained for agricultural production, which leads to their ongoing degradation. In some regions, highly economically valuable food products (vegetables) are produced under intensive conditions. This study aims at identifying policy instruments effective in promoting the adoption of more sustainable, extensive management practices on peat soils, and thus in protecting the remaining peat soil layer in those agricultural areas. Using a computerized, visualized, and interactive economic experiment, the study investigates the effect of different forms of agri-environmental payment schemes on farmers’ decision making. The experiment depicts the situation of vegetable producers on drained peat soils and simulates their decision situation if offered an incentive for more extensive management practices.

Extensive management on peat soil requires rewetting the area, which requires cooperation between farmers (drainage systems are operated collectively). Agglomeration payments have been proposed in the literature as a potential incentive mechanism for promoting cooperation among farmers. Because of the variable nature of the underneath mineral soil layer, the future vulnerability of farmers to peat soil loss varies and implies heterogeneity in long-term farm profit functions and the opportunity costs of switching land use. We test the effectiveness of homogeneous versus differentiated agglomeration payments. The main hypotheses tested are 1) agro-environmental schemes are necessary to incentivize a more sustainable peat soil management, and 2) an agglomeration payment following respective opportunity costs most effectively enables early farmers’ cooperation and peat soil preservation as compared to a homogenous agglomeration payment. We further assess the impact of fairness and social preferences on policy effectiveness.
The experiment was conducted with Swiss agricultural students, many of whom are farmers. Groups of two participants played first a baseline phase (with no policy intervention) and then a treatment phase where an agglomeration payment is introduced and allocated to the player in exchange of collectively adopting an extensive land use on rewetted peat soils. Sufficient sample size was reached for the two treatments tested, yet data collection will be completed by February 2016. Preliminary results indicate that the rate of cooperation among players for the homogenous payment is up to three times higher than for the baseline; 80% of the groups cooperate and, within those groups, 90% of the players adopt a more extensive land use. The differentiated agglomeration payment does not induce early cooperation among players, and the rate of cooperation is significantly lower than for the homogenous payment (around 50%). Further analyses such as correlation analyses between the nature of players’ decisions and their preferences will be conducted to provide accurate interpretations to these results and to disentangle the effects more systematically.

Testing neighbourhood effects for biodiversity conservation: A Willingness to Accept experiment in the context of European Agro-environmental schemes
Sergio Villamayor-Tomas (Swiss Federal Institute of Forest, Snow and Landscape Research)

An important portion of biodiversity policy in European countries relies on the willingness of farmers to enter voluntary conservation schemes. Farmers have to be offered sufficient incentives to persuade them to join a scheme but countries have budgetary constraints. Revisions of European agri-environmental schemes (AES) have pointed to the need to improve the cost-effectiveness of the schemes via better spatial targeting of interventions and increased participation by farmers. The agglomeration effects resulting from encouraging participation in specific areas may lead to important cost-savings. However, spatial targeting of interventions usually requires that farmers coordinate across borders. A number of studies have identified factors that contribute to willingness of farmers to coordinate in the AES context and also in other contexts. Underlying to those factors there are different causal mechanisms, including social control, benefit and cost distribution, and environmental effectiveness motivations. This paper uses a choice experiment to shed some light on the relative weight of those mechanisms. The choice experiment was carried with 150 farmers from Germany, Switzerland and Spain. The experiment different scenarios based on 3 labels and 4 attributes. Labels include different soil, water and biodiversity ecosystem services. The attributes include: requirement for spatial coordination, participation, right of appeal, and monetary payment. The analysis explores the relative weight of those attributes as well as interactions with farm, socio-economic and physical characteristics of participants.

Effects on intrinsic motivations of Payment for Environmental Services
Maria Claudia Lopez (Michigan State University)

Ecosystem services such as carbon sequestration are public goods benefiting society all over the world. The provision of these services entails very often a social dilemma for communities living nearby. On the one hand, communities may use these resources to guarantee their livelihoods, and on the other hand, society as a whole benefits from the conservation of these resources and the services they provide. How to manage these services has been an important puzzle for governments, especially in the context of the developing world. Payments for Environmental Services (PES) have been implemented all over the world as a solution to the environmental damages many ecosystems worldwide are experiencing. The literature identifies
some benefits of using PES as well as finds ways in which they fall short. Among those are the facts that nature is commodified by PES and that the consequences of that commodification on users’ intrinsic motivation towards the resources, collective action and environmental values may be displaced. The question becomes even more relevant knowing that in many cases, these payments are a short-term (or maybe mid-term) solution and that the program will end at some point. With that in mind, the question becomes: how do the payments and their withdrawal affect the motivation structures users may have towards the resource? In this paper we address that question by implementing a series of field economic experiments. Our design allows us to study users’ behaviour before a PES is implemented, during implementation and after the PES is removed. We conducted these experiments with forest users in Uganda, Bolivia Tanzania, Indonesia and Peru-- both in communities where a PES program is being implemented and in communities where it has not. In addition, we measure individual socio-economic characteristics to explain the results of the experiment. Our findings suggest that the payments may not lead to crowding out when community members have the opportunity to discuss the implementation of PES.
# B19 - Networking, comparing, and integrating urban commons initiatives in research and action

Wednesday 11 May 2016, 14.00-16.00, Hallerstrasse 6, Room 205

Panel Convenor:

Ileana Apostol (CNRS Paris)

The key question addressed in this panel regards the characteristics of technology that can support and interconnect various urban commoning activities. We address four different areas of collective action in the city: community networks, social infrastructure, cooperative housing, and community currencies. Every paper introduces one of the above areas of commoning and explores different possibilities for linkages between them as currently explored in two new EU Horizon2020 projects, MAZI, http://mazizone.eu, and netCommons, http://netcommons.eu. A long-term vision of these research consortia is to collaborate toward promoting a spirit of sustainable living, while advancing the rich European democratic heritage through research and action. They wish to do this within specific cultures that shape their current and future collective living in the midst of diversity.

More specifically, the first paper by Antoniadis, Dulong de Rosnay, and Tréguer, reflects on the understanding of (wireless) community networks “as a commons” for equitable and affordable access to the Internet, but also for the deployment of local services, possibly supporting other commoning activities. Using the example of Guifi.net in Barcelona, it highlights the potential of communication networks to be owned and managed by citizens themselves, and identifies important socio-legal, governance, financial sustainability, and technical challenges that need to be addressed in this context.

In the next paper, Apostol, Gaved and Unteidig discuss the role of ICTs, and DIY networking solutions in particular, for the small scale social infrastructures of urban spaces for collective life, touching upon the role of technology in creating alternative materializations of social space, and in facilitating social learning processes.

As an example of grass-roots social infrastructures at the neighbourhood level, the third paper by Philipp Klaus presents the “young” cooperative housing and living projects in Zurich, through the example of Kraftwerk1, the first of a multitude of projects of this sort.

The last paper presented by Jens Martignoni introduces the concept of complementary currencies and discusses its potential for supporting small-scale commoning activities such as cooperative housing and living projects similar to Kraftwerk1 in Zurich, or as community networks like Guifi.net that are discussed in the previous presentations.

In this manner, rather than a series of individual presentations, this panel offers multiple dialogues that aim to network and integrate the specific facets of urban commoning by reflecting on potential interconnections.

We are proud to have with us, as a special guest, Hans Widmer (aka P.M.) whose book bolo'bolo was one of the main inspirations for the Kraftwerk1 project, and who is active in the development of a new initiative in Zurich by the name of NeNa1, which encompasses many of the ideas discussed in this panel.
Exploring the potentials of self-managed communication tools for development of cooperative living, housing and related urban commons projects
Philipp Klaus (INURA Zurich)

As a transdisciplinary research process and integral part of the MAZI-project (gr. “together”), http://mazizone.eu, INURA Zurich, in collaboration with NetHood explores the potentials of self-managed communication tools as facilitators for social contact, deliberations, and knowledge transfer in housing cooperatives in Zurich, Switzerland.

Cooperative housing started as a movement at the beginning of the 20th century as a self-help initiative aiming at providing housing for workers that is affordable, hygienic, and secure in terms of eviction. Throughout the 20th century more than ninety housing cooperatives realised hundreds of buildings and today provide living space for 100'000 people, a quarter of the city's population.

Since the 1980s new cooperatives have been founded. They claim more democratic rights within the coop, less hierarchic organisation and more inclusive decision making. Every member holds a share of the cooperative and additionally pays an amount related to the respective apartment, depending on its size. Basically, the buildings are managed by their inhabitants. The members rent and own the flat at the same time.

At the beginning of the 21st century, the self-managed model was expanded to bigger complexes and to "more-than-just-housing". The members of the Kraftwerk1 cooperative started working on the realisation of a utopia and set up a programme: ecological living, restaurant, offices, ateliers, a self-run store, contracts with cooperative food producers, a kindergarten, apartments for handicapped people, solidarity funds, community rooms, hairstylist, flats for families, singles, communities of 5 to 10, common guest rooms. In 2001 the building was finished. 240 people moved in, 90 people started working in small businesses.

Exploring the potentials of the MAZI tools in existing urban commons projects offers the opportunity of unlocking knowledge and facilitate networking activities regarding the growth of the urban commons realm.

The existence of dozens of working groups and decision making processes in Kraftwerk1 is a perfect starting point for exploring DIY communication tools as a means to facilitate social interactions and the collection of knowledge and ideas, both online and offline. Our starting point will be the accumulation of knowledge around the organization of the cooperative and its transfer to different political, social and economic environments, namely the recently launched NeNa1 initiative in Zurich (nena1.ch) and various communities and municipalities in Greece in collaboration with the INURA Athens team. For this, we will install together with members of the cooperative a small number of MAZI nodes that will collect different types of input from residents and their guests in addition to providing free and easy access to the local Intranet. A Hybrid-Letter box, designed and implemented by the Design Research Lab in Berlin, will allow non-savvy residents to participate in the discussion by simply writing their ideas on a card. The implementation will be accompanied by permanent observation and followed by a survey (interviews) about the successes and failures of the application.

The goal of this paper is to sketch the required transdisciplinary research framework, which will facilitate the collaboration of different actors around our ambitious goal.
What does "as a commons" really mean? A critical reflection on the case of community networks

Panayotis Antoniadis (NetHood Zurich)
Melanie Dulong de Rosnay (CNRS Paris)
Félix Tréguer (CNRS Paris)

The concept of the commons has become a popular means to argue in favour of a more democratic and sustainable management of shared resources, which may have the characteristics of a common-pool resource or a public good. From basic resources such as water and energy the discussion moved to complex constructions such as the "city as a commons", "knowledge as a commons" or even "money as a commons". The paper discusses whether information and communication technologies, and more specifically community networking infrastructures, can be treated "as a commons" when they are shared, owned and managed by citizens, and how they can become a sustainable alternative to market-based networking infrastructures (Baig et al, 2015; De Filippi & Tréguer, 2015).

Despite the open and distributed nature of the Internet as a technological artefact, the access to it for the general public has been traditionally a commercial service provided by a limited number of Internet Service Providers (ISPs), as a "private" good not meant to be shared, and with a limited mode of connectivity, suitable more for "client" than "server" applications. Since the late 90s, the advance of wireless technology made it easier to build local networks of various scale that can offer symmetric and free access to the Internet. This led to the birth of numerous Wireless Community Networks around the world, which provided an ideal playground for technology enthusiasts to experiment with new technologies and build their own communication networks from scratch. This infrastructure provided also Internet access to all the members of the network, and sometimes beyond, but also the option to host local applications and services. It also led local communities to experiment different governance organizational models and funding structures towards sustainability. In parallel, the increasing threats on privacy and freedom of expression, among others, due to the increased power of global Internet platforms has brought more attention on the potential for local networks that can operate outside the commercial Internet.

Today, some of these community networks have even evolved to professional broadband Internet providers, following a bottom-up model of distributed ownership and governance. The Guifi.net network in Barcelona counts over 30K nodes, offers good quality of Internet access for low price in the city, and has brought broadband connectivity in rural areas where commercial providers did not have an interest to invest.

In this context, the paper is critically reflecting on the application of the concept of the commons to collectively owned network infrastructures, by analysing the existing narratives and their evolution over time, from different disciplinary perspectives. The methodology combines socio-legal and computer science analysis of the technical infrastructure and the governance arrangements of networking infrastructures such as Guifi.net. A modified version of the Institutional Analysis and Development framework (Ostrom, 1990) adapted to knowledge (Frischmann, Madison, Strandburg, 2014) and infrastructure commons (Frischmann, 2012) is used to assess the nature of the resource and the community and to discuss under which circumstances local networking infrastructure can be treated "as a commons".
Together, enacting the urban commons
Ileana Apostol (CNRS Paris)
Mark Gaved (The Open University, UK)
Andreas Unteidig (Berlin University of the Arts)

How do people connect with each other, how do they network and socialize in our times? Where are they located while socializing? Are all citizens represented in the public arena? Is this arena for urban collective life still the market square, the ‘agora’, the park, the cafe or simply the sidewalk? Actually what are our contemporary spaces for social life? How are they produced and who is responsible for providing them? How are they managed and operated? Answering such questions becomes more and more difficult within the current urban conditions. On the one hand, that is due to the advances of information and communication technologies (ICTs) enabling social contact and activities within overlapping physical and virtual spaces for socialization. On the other hand, it is so because of the increasing privatization and commodification of public spaces, together with the shrinking capabilities of the state and of local governments to provide their citizens with public goods. In such circumstances, a large number of citizen initiatives offer the alternative at various scales and in various organizational forms, providing manifold perspectives on possible routes toward, and meanings of the urban commons. The questions above remain, nevertheless, to be understood for each particular case.

In this paper we attempt to build an understanding of what social infrastructures – spaces, networks, tools and protocols for social life – may imply presently, and also how ICTs could facilitate and stimulate people’s contact, information and resource sharing, and, more generally, collective practices. We hereby focus on those practices, abilities, incentives, tools and tactics for citizens to interact with others, particularly strangers, in their immediate physical proximity – a city, a neighbourhood, a house, as we simultaneously see these interactions being limited and endangered by dispersive forces within processes of globalization, as well as bearing the potential of being sustainably amplified by exactly the technologies, changing practices and awareness that threaten them at first sight. Appropriated space is necessary, however, for integrating the continuous expression of shared values in the everyday life activities. Thus, another aim of the paper is to unveil the dialectical relation between social space and the forms taken in the physical space, including ICTs role in creating alternative materializations of social space.

To generate stimulating social environments in the city, we explore the role of triangulators capable to boost the connection of strangers in urban settings, whether they come in the form of the always successful ‘tea and cake’ technology or rather as hybrid spaces generated by recent instantiations like the hybrid letterbox or the MAZI Mondays node/gatherings. We argue that, when this social space is produced, owned and used in some collective form, it shares characteristics of the urban commons regardless its geographic, temporal and dynamic characteristics. Important is that the use value of this space is more relevant than its exchange value, and that the spirit ‘in common’ generated through the collective activities in such space has the potential to multiply through replication within the spatial practice of the city. It is in this process of replication where we aim to provide tools, guidelines, and to transfer knowledge, in the form of the MAZI toolkit, which is meant to facilitate social learning processes.
Community Currencies as a Commoning tool: The case of Cooperative Housing and Community Networks

Jens Martignoni (NetHood Zurich)
Panayotis Antoniadis (NetHood Zurich)

Grassroots initiatives are often thought as depending mostly on voluntary effort, built on ethical community values rather than financial objectives. Similarly, the management of the commons is seen incompatible with centralized forms of accounting and enforcement. However, research and practice, with most notable the work by Elinor Ostrom, shows that self-organization cannot become sustainable without some form of organization. Community currencies provide exactly a standardized way of organization by framing transactions and accounting for different types of resource exchange in a certain geographical area. They are further able to provide incentives for solidarity and local economic growth. Most importantly, they can be designed according to the local values and objectives. Time Banks for example, define time as the main measure of value of one’s effort in community activities, while mutual credit systems, like numerous LETS systems, reject the notion of interest rate on credit. However, no matter how attractive they look, at least for the proponents of self-determination and independence, few community currencies have managed to achieve significant scale. But mostly their design did not take in account “the power of the commons”. The most successful schemes until now have followed a pragmatic approach in terms of sustainability, such as the Sardex in Italy, the RES in Belgium, or the Bristol pound in the UK.

The paper wishes to build on the lessons learned from failures and success stories in order to design special purpose community currencies for supporting specific commoning activities in the city. Such activities include the case of cooperative housing and living projects, see http://o500.org/, and community networks that provide broadband Internet services, like Guifi.net in Barcelona, see http://guifi.net. In each case, the goal of a well-designed currency would be to solve a specific problem. A challenge that cooperative housing initiatives as well as community networks face today, is the lack of voluntary self-help activities, one of the main attributes of their identity that is fading away. Guifi.net is one of the few community networks that managed to solve this problem, by establishing a foundation that operates a resource allocation and rewarding scheme. This scheme rewards those that contribute resources to the system and requests payments in EUR for those that wish only to consume. A community currency could replace the requirement for payments in EUR with the option to contribute not only in networking resources but also through other services outside the network, making it more open, more independent, and a driver for the local economy.

The paper analyses some important design criteria for such a currency, it presents scenarios of a possible implementation in community networks as well as in housing cooperatives, and explores possibilities of interesting combinations between such commoning activities in the city. Some theoretical matters based on the similarities of CN’s and CC’s as networks transporting information respectively value are discussed as well.
# B20 - Emergence of smart cities - a confluence of common and private resources towards a new definition of urban commons

Wednesday 11 May 2016, 11.00-13.00, Main Building, Room 331

Panel Convenor:

Ramanacharyulu Venkata Amaravadi (Xavier Institute of Management and Entrepreneurship Bangalore India)

The Proposed initiative of development of a hundred smart cities in India over the next five years was inspired by the experience of last decade by Europe, starting from the use of ICT in urban governance to integrated management of civic amenities in different metropolitan cities in Europe.

The concept of smart city may be described as “a technology driven urban commons, that brings together technologies at hard and soft levels, to offer not only basic infrastructure to its residents, but to give a decent quality of life, a clean and sustainable environment, through application of a range of smart solutions. Basic infrastructure, in terms of assured water supply, sanitation and solid waste management, efficient urban mobility and public transport, robust IT connectivity, e-governance and citizen participation, safety and security of citizen to become available and accessible to all.

These cities are managed through smart solutions, that comprise of public information, grievance redressal, electronic service delivery, citizen’s engagement, waste management in terms of recycling, re-use and conservation, smart management of water, efficient energy management and green buildings, smart parking, intelligent traffic management system etc.

The smart city concept is gaining attention not only in fast developing economies such as India, where, within next five years, a hundred cities are planned to be transformed into smart cities; but in rest of the world too, where the active support and commitment of some of the technology leaders of Europe, USA and other developed nations, is catalysing the people centric urban congregations or cities. The progress made over the last decade or so in different countries, including Switzerland, Sweden, Germany, on various aspects of institutionalization of town planning and management needs a fresh look from the perspectives of common property resources management.

The proposed panel would like to examine the concept of Smart Cities of India, and contrast it with the advances that other countries made in redefining urban commons on the platform of smart living technologies. It is proposed that the research may throw light in the following three dimensions, not necessarily, exhaustive by any means, but as an indication of how commons and privates are rediscovering their inter-dependence. Inter alia, the panel would like to examine:

- The axiom of retrofitting; redevelopment; and green-field development of land for developing a smart city pre-supposes the use of urban land – primarily, a common property, as the backbone of the initiative. Such a strategy, as spelt out by the government of India, throws open the challenges of dovetailing commons with physical infrastructure, virtual governance systems and co-creation of systems by private, public organizations and citizens; how the urban communities need to evolve smart city as a new-age common, will be one dimension. It is essential to study whether such experiences exist elsewhere in the world, with what results and lessons they could offer for other countries and regions;
• Development and co-creation of new systems of urban community management through technology solutions by various European Organizations as well as Global MNCs, and the emergent paradigms of management of co-axial resources in terms of service delivery, people participation and governmental partnership - may be addressed in the second dimension; and

• Emerging experiences of deployment of IT driven smart city services such as home land security systems, intelligent traffic management systems in different cities across the globe; the challenge of cleaning the rivers and making them pollution free for human habitat; inter-linking cities with villages and bringing up similar technology driven rural communities for inclusive development through urban-rural interfaces of connectivity; communication and market access, may be addressed in the third dimension.

Paper Contributors:

Smart traffic management systems – the starting point for creating urban commons
Ramanacharyulu Venkata Amaravadi (Xavier Institute of Management and Entrepreneurship Bangalore India)
Tulika Kalra (Xavier Institute of Management and Entrepreneurship Bangalore India)

The Research Panel examining the concept of a smart city as an emergent urban commons from the Glocalisation of resources, technology and people. It proposes to study three dimensions of creating, managing and sustaining smart cities. They are:

• The axiom of retrofitting; redevelopment; and green-field development of land for developing a smart city
  o It pre-supposes the use of urban land – a common property, as the backbone of the initiative. Such a strategy, throws open the challenges of dovetailing commons with physical infrastructure, virtual governance systems and co-creation of systems by private, public organizations and citizens;

• Development and co-creation of new systems of urban community management through technology solutions by various European Organizations as well as Global MNCs
  o It pre-supposes development of management systems for co-axial resources in terms of service delivery, people participation and governmental partnership - may be addressed in the second dimension; and

• Deployment of IT driven smart city services such as home land security systems, intelligent traffic management systems in different cities across the globe;
  o It expects the challenge of redefining use of natural resources such as rivers and forests for urban co-consumption on one side; inter-linking cities with villages as consumption centres vis-à-vis production centres; and nurturing technology driven smart villages for inclusive development through urban-rural interfaces of connectivity, communication and market access.

The proposed paper attempts study of the second dimension mentioned above, where technological and management solutions tried and tested in European and other smart cities get adopted for the new age challenges faced by the smart cities of India.

The paper, inter alia, examines the technological solutions being tested in traffic management systems and how these require a common understanding by citizens, technology providers
and service providers so that smart governance is ensured. Without smart governance, smart city concept will not be complete in achieving its own goals. The objectives of the paper will be:

- To identify the specific aspects of technology, service definition and service delivery for co-creation and co-consumption for traffic management in a smart city
- To spell out the role of various players in realizing the benefits of traffic management systems and
- To examine whether the technology, service delivery and participation by the players involved could seek sustainability of the service for longevity of the smart cities.

The study will focus on the proposed components of traffic management systems in the proposed smart cities of India and how they would evolve from the existent smart cities of the world. The focus will be to identify the specific components of traffic management systems in these systems, the stakeholders of these systems in a smart city and how they help create a sustainable urban commons.

**Use of technology for easing traffic mobility in smart cities**

Ankit Tripathy (Xavier Institute of Management and Entrepreneurship, Bengaluru, India)
Tanisha Mehrotra (Xavier Institute of Management and Entrepreneurship, Bengaluru, India)
Ritu Sanghavi (Xavier Institute of Management and Entrepreneurship, Bengaluru, India)
Yogesh Malpani (Xavier Institute of Management and Entrepreneurship, Bengaluru, India)

A smart city is defined as the ability to integrate multiple technological solutions in a secure fashion to manage the city’s assets – the city’s assets include, but not limited to, local departments information systems, schools, libraries, transportation systems, hospitals, power plants, law enforcement, and other community services. The goal of building a smart city is to improve the quality of life by using technology to improve the efficiency of services and meet residents’ needs. Business drives technology and large-scale urbanization drives innovation and new technologies. Technology is driving the way city officials interact with the community and the city infrastructure.

Smart city initiatives cover a wide range of projects, but urban mobility is becoming a lynchpin issue that ties together energy reduction, sustainability, and technology innovation,” says research director Eric Woods. "Devising an environmentally friendly, economically efficient, and voter-acceptable mobility strategy” for the modern city is at the top of the priority list for many smart city planners.

New projects are being designed and these are all about getting the urban road right; addressing the issues that have made Indian roads so notorious for their chaotic traffic, potholes, broken footpaths, overflowing drainage, poorly placed power transformers and their hanging, spaghetti tangle of electrical wiring and telecom fixtures. India's urban roads currently suffer from a two-fold gap: a lack of design specifications; and a poor procurement process.

One of the projects designed in this regard is Tender SURE which addresses both these gaps by providing vital, replicable blueprints for governments and contractors alike. Salient features of Tender SURE roads:

- Uniform Standard Carriage Way width from one junction to another.
- Properly designed footpaths providing ample space for pedestrian.
- Bicycle lane wherever required.
- Bus Bay to accommodate easy egress and ingress of passengers of public transport buses.
• Well-designed Bus Stops
• Parking Bay for parking of vehicles.
• Road intersection development.
• Dedicated corridors below footpaths to lay conduits of essential amenities such as electricity, water, sewage, OFC etc. This will eliminate the need to excavate the roads for repairs.
• Bituminous or Rigid pavement carriageway built with proper camber and profile as per Indian Road Congress (IRC) guidelines, so that vehicular movement is streamlined.
• To minimize power consumption and increase longevity of usage LED streetlamps are used.
• Incorporating Road sign, Road marking and also Zebra crossing in junctions for pedestrian crossing.
• Proper storm water drainage system on both sides of the road to eliminate flowing or ponding of rain water on road.
• Proper landscaping to increase the aesthetics of the roads and city.

This paper intends to document the initiatives taken by a city aiming to become a smart city in a larger perspective, and the results it is drawing as on date.

**The Sharing, Collaborative, Cooperative City**

Christian Iaione (LUISS LabGov)

World urbanization is a fact by now. Cities as designed and managed in the 20th century are unsustainable. Space for all in the city is going to be an issue. Sharing, including home sharing and sharing as a lifestyle is increasingly being identified as one transformative mechanism for smart cities: reducing consumption; preserving resources, preventing waste and providing new forms of relations. However, such claims currently lack solid conceptual and empirical foundations. This paper advances the idea that sharing may rest on the design principles and methodologies of the governance of the commons. It will identify and examine diverse practices of city-based home and lifestyle sharing economies, first determining their form, function and governance and then identifying their impact and potential to reorient such practices. The paper has two objectives: to advance theoretical understanding of contemporary sharing economies in cities and to generate a significant body of comparative and novel international empirical knowledge about sharing economies and their governance within global cities.
Panel Convenor:

Robert Heinze (Historisches Institut, Universität Bern)

Paper Contributors:

Making of the Urban Commons in the Brussels Capital Region (cancelled)
Burak Pak (Faculty of Architecture, KU Leuven Campus Brussels)
Yves Schoonjans (Faculty of Architecture, KU Leuven Campus Brussels)

The Power of Neighbourhood and the Commons
Hans E. Widmer (Neustart Schweiz)

Based on the optimizing of various parameters – ecology, social coherence, food logistics, economic organization, communication – Neustart Schweiz suggests urban neighbourhoods of about 500 members as a viable first module of urban structuring and the management of a first sphere of the commons. The other modules are: town/borough (basic commune), region (including a big city), territory (10 million inhabitants, 50'000 km2), and the planet. Every module corresponds to an extended sphere of the commons: public services, regional natural and economic resources, territorial infrastructure (energy, health, industry, emergency support, „state”), planetary agencies for the management of energy resources, oceans, creative and scientific commons, emergency interventions etc. According to the recommendations of Elinor Ostrom, the governing of the diverse spheres of the commons is based on democratic institutions of equal rights and general participation.

Urban neighbourhoods have the potential to be areas of immediate participation and empowerment. On this firm basis larger units can be governed by systems of delegation (parliaments, councils, elections etc.), without the risk of losing control over centralized power structures. The size of the proposed modules, especially the territories, is seen as another check to the centralization of power.

Typical neighbourhoods are linked to an agricultural basis in the region of about 80 ha (European conditions, temperate climates), that provides most of the food. Exchange contract with other neighbourhoods can provide additional products. Ideally neighbourhoods are constituted as housing cooperatives that manage buildings and surfaces as a commons. An internal economy of goods (food) and services (child care) can be a first commons, based on shared space, work, equipment and know-how. The sharing of resources has an ecological impact, so that a lifestyle based on 1000 Watt is possible without renunciation. Urban neighbourhoods have a collective infrastructure – big kitchen, food depot, restaurant, bar, café, media centre, bath, kindergarten, laundry etc. – that corresponds to a four star hotel. Due to these communal services individual housing space can be reduced to 35 m2 per person (the average of space allotted in housing cooperatives in Zurich), down from 50 m2 currently on the national level. Less building (grey energy), less heating (50 % of the energy use in Switzerland), fewer shopping expeditions – all make for lower energy consumption.
Cities structured by neighbourhoods and boroughs (20'000 to 50'000 inhabitants) can provide more democratic participation, re-localised services, a better mix of production and reproduction and a sense of belonging based on fact and not on ideology.

The change from an economic system based on growth and inequality to a system based on degrowth and equality means replacing private ownership of socially relevant resources by com-mons governed on different levels. The establishment of a global society based on commons is essential for the survival of the biosphere and for the ending of civil and international wars, of forced migration. Evidently this process can only be a political one, for it impinges on a variety of ingrained interests. The current urban uprising demanding democracy, justice and a decent life for everybody is the political expression of the emerging global commons.

**Land Tenancy and Agricultural Practice in the Bamenda Wetlands: Between Self-Governance and Open-Access**

Sandro Simon (University of Basel)

Situated in the North-East of the city, the Wetlands constitute the ultimate larger open sphere within Bamenda (Cameroon) and mark the boundary between two Fondoms and two governmental subdivisions. Within the last 50 years, the area changed from dry- to wetland and, in terms of de jure property, from customarily controlled over individually held (but customarily embedded) to governmentally owned land. Today, urban agriculture is officially banned from the inner city and the local government perceives the wetlands as a 'undeveloped' and 'misused' place that should be transformed into a 'fixed', 'formalized' and 'modernized' version of the existing city centre. Nonetheless, herders, fishers and especially a multitude of mostly female farmers rely on the wetlands for their economic activities and to foster their progenerative attachment to the land. For the farmers, who will be at the centre of this paper, the fruitful soil allows them to cultivate crops for marketing or to sell and lease plots, which helps them a) to increase socio-economic in-dependency and to solidify their control over land and/or b) to combine child upbringing with gainful employment.

This paper seeks to trace the increasing migration, urbanization, commoditization and governmental acquisition from the 1960s on in today’s farmers’ attachment to and dwelling in the land, their self-perception as marginalized but economically quite successful urban dwellers and their relationships to local authorities.

Since the governmental acquisition was rather incomplete, the farmers find themselves in a situation of institutional unfit and legal and normative pluralism: their informal use is tolerated but they are at the same time marginalized, while the (partly dismantled) customary authorities’ services and their claims on property and territory coexist, overlap and contest with the services of the governmental authorities.

Farmers could refer to the authority that fits their specific interest best, but their access is bound to their informality, bargaining power and customary affiliation, so that they effectively try to circumvent both authorities as far as possible and resolve conflict among themselves. The difficulties of enforcement together with the heterogeneity of the users hence further disadvantages more institutionalized common property regimes. As one result, there is no common control over a sustainable use of the wetlands where the users keep their resource extraction in balance with those of others, be it farmers, fishers or herders.

In this authority-vacuum and without establishing solid alternative governing institutions, the farmers are hence striving to maintain a social equilibrium among themselves based on norms.
such as seniority, experience, good neighbourhood, hindsight towards newcomers or generosity towards the ones with little land and on the difficulties to actually enforce these norms in case of transgression.
An empirically-tested model of the emergence of institutions
Giangiacomo Bravo (Linnaeus University)
Amineh Ghorbani (Delft University of Technology)
Ulrich Frey (University of Halle)
Insa Theesfeld (Martin Luther University)

Four decades of research have shown that Hardin's Tragedy of the Commons, although frequently occurring in open access resources, can be avoided thanks to the building of carefully-designed endogenous institutions. However, the specific processes leading to institutional change are often difficult to study in the field due to the large number of factors potentially involved and because such processes often occur on temporal scales beyond the scope of most social science research. Laboratory experiments may offer a way out of the problem, and they indeed significantly contribute to our understanding of the dynamics of common-pool resource (CPR) situations. Nevertheless, the number and nature of factors that can be reasonably tested in the lab are limited. For instance, it is difficult to design experiments involving long-term interactions among participants or doing studies needing large samples of subjects.

Agent-based models (ABM) represent a method that can nicely complement both experiments and field work. Their main advantage is that they allow to design virtual experiments using more flexible set of conditions than what is feasible in the lab and to analyse their dynamics more easily than what is possible in the field.

In this work, we present an advanced ABM designed to replicate patterns of institutional emergence commonly observed in the field. It is based on the "grammar of institutions" framework, first presented by Crawford and Ostrom (1995), and takes a dynamic approach to explain how CPR management institutions emerge from the beliefs and actions of users. The new model relies on an existing ABM using the ADICO grammar to model the emergence of commons institutions and includes decentralized decision-making capabilities of agents, cheating and rule enforcement.

The validity of the model was tested using a dataset of "classical" cases of long-enduring CPR management institutions covering irrigation systems and fisheries. The test was performed using a path modelling approach based on partial least squares principal component analysis (PLS-PM). This allowed to estimate complex models, including both latent and manifest constructs, starting from both the real and the simulated data. The strength of the "paths" estimated on the empirical data was then compared with the one of the corresponding path in the ABM data. Although not all the empirically relevant paths were reproduced by the
A new classification of co-management regimes – performance of community managed, co-managed and government-managed irrigation systems

Ulrich Frey (University of Halle)
Sergio Villamayor (Swiss Federal Institute of Forest, Snow and Landscape Research)
Insa Theesfeld (Martin Luther University, Halle-Wittenberg)

Since top-down governance did not always meet the expectations, in many countries great efforts have been made in the last decades to include local communities in management processes, thus linking local management with the state. This development lead to a variety of different forms of collaboration between governments and communities. Often, these different forms have been collected under the umbrella term co-management (Armitage et al. 2009).

It may be described as a continuum ranging from mere acknowledgment of local users by the state to equal partnership. For that, different classifications of co-management have been put forward. Although these classifications facilitate comparability of co-management cases, they also run the risk of missing important contextual aspects. There are potentially an infinite number of constitutional, collective choice, and operational aspects upon which the distinction between top-down, co-management and completely community-based can be constructed.

This paper aims to shed some light on the implications of different classifications of management systems. While traditional classifications often do not go beyond labelling a system, we introduce a more nuanced classification based on variables on information flow, advisory status and partner-ship. In this article, we will use this classification and apply it to a large sample of farmer-managed and government-managed irrigation systems (n = 244). This enables us to test the applicability of our classification system and compare it with traditional classifications.

A second aim of this paper is to advance the question whether there are differences by regime concerning outcomes like productivity or fairness. Although numerous advantages have been associated with co-management, it is difficult to establish them in practice. Some indications, however, suggest that co-managed regimes lead to more positive ecological and social outcomes (e.g. Gutiérrez et al. 2011). However, it is still unclear whether this is a robust result. This is partly due to the lack of comparative studies but might also be related to the classification problem mentioned above. This study addresses this research gap. With both classifications mentioned above, we test empirically whether different regimes (community-based, co-management and state-governed) are associated to different management performance like water adequacy or fairness.

A first result is that the two classification schemes differ in some important aspects, highlighting that the different ways to define and operationalise co-management depend on both theoretical and contextual aspects.

A second result is that farmer managed systems do perform significantly better than other management regimes in three out of four ways to measure performance:
- Productivity Metric ton (Mann-Whitney-U-Test, n = 244, p < 0.05)
- Productivity Head intensity (Mann-Whitney-U-Test, n = 244, p < 0.01)
- Productivity Tail intensity (Mann-Whitney-U-Test, n = 244, p < 0.001)

Only in water deliverance adequacy (Mann-Whitney-U-Test, n = 244, p < 0.001) farmer-based systems perform worse. The other four outcomes, including equity, do not differ significantly between the governance regimes.

**Integrating heterogeneous multi-level values and the co-management of social-ecological systems framework**

Carena van Riper (University of Illinois)
Andreas Thiel (Humboldt University, Berlin)
Marianne Pencker (University of Natural Resources and Life Sciences, Vienna)
Michael Braito (University of Natural Resources and Life Sciences, Vienna)
Adam Landon (Warnell School of Forestry, University of Georgia)
Jennifer Thomson (College of Forestry and Conservation, University of Montana)
Catherine Tucker (Department of Anthropology, University of Florida)

The social-ecological systems framework (SESF) developed by Ostrom and colleagues has provided a useful ontology of the complex interactions between people and nature, as well as their role in shaping the perceived costs and benefits of collective action situations. Over the past decade, research guided by the SESF has effectively bridged ecological, socio-economic, and institutional drivers affecting the co-management of social-ecological systems. However, critiques have been levelled against the SESF, including its rigid assumptions about institutions, static view of human-environment interactions, and lack of systematic engagement with the value concept. In response, we present a conceptual model that incorporates the dynamic interaction of values that occur at multiple levels into the action situation of the SESF. We also explore how collective action affects the diversity and types of values held and assigned by stakeholders over time. To demonstrate the tenets of our model, we synthesize results from three example studies of: 1) residents and tourists on Hinchinbrook Island National Park, Australia; 2) members and non-members of collective power plant organizations that invested in photovoltaics in Styria, Austria; and 3) community members engaged in watershed management in the Montaña Camapara Community Watershed Reserve, Honduras.

Drawing on multiple forms of knowledge and methods, we suggest that different types and levels of values (i.e., individual, cultural, assigned) can be integrated with the SESF to more fully understand collective behaviour. In support of this notion, results from survey data collected on Hinchinbrook Island indicated that a plurality of values (individual and assigned) were considered by managers who engaged in a co-management approach to resource protection. Secondly, we contend that value heterogeneity signals risk for conflict and higher transaction costs, which might reduce the willingness of actors to engage in collective action. Results from interview and survey data collected from members of a citizen-owned solar power plant group in Styria illustrated homogenous patterns of individual values, and raise questions about shared values that may have stimulated or been shaped by the emergence of collective action. We suggest the tie between values and transaction costs is an important area for future research given that homogeneous groups need less time effort for co-defining a vision and reaching agreements. Finally, we contend that behaviour performed in collective action situations affects value levels at different rates of change over time. In support of this assertion, results from community members in Honduras collected over a ten-year period underlined the importance
of eliciting information about shifts in cultural values over time when considering collective action situations related to watershed management.

In sum, results from our three example studies offer a more complete and nuanced understanding of the role of values at multiple levels in shaping collective behaviour. We also discuss the relevance of our conceptual model for future research and natural resource management decision-making. Specifically, we review how managers can cope with diverse value types and levels, heterogeneity and its implications for transaction costs and benefits, and the bi-directional relationships between values and behaviour over time.

Democracy and the Commons: Overcoming the Tragedy with the Ostroms
Lukas Peter (University of Zürich)

Since the financial crisis of 2007/8, an interrelated multiple ecological, ecological and political crisis can be discerned (Altvater 2010; Brand 2009; Demirovic et al. 2011; Demirovic 2013). Generally put, it can be argued that both the ecological and the political crises have their roots in unstable economic institutions that support perpetual growth through extraction, dispossession and outsourcing on the one hand and through an increase in socio-economic power asymmetries on the other hand.

At least since Elinor Ostrom received the Nobel Prize in Economics in 2009 for her lifelong work on the sustainable self-governance of common pool resources, has the concept of the commons been propagated as an answer to this multiple crisis and as a sustainable alternative to markets and states (E. Ostrom 2010). Although highly insightful, her empirically oriented work is better understood when complemented with the political philosophy of her husband Vincent Ostrom. For this reason, in this paper I will analyse whether the work of Elinor and Vincent Ostrom presents us with a feasible “concrete utopia” (Bloch) that might limit the effects of these crises.

In order to assess this hypothesis, I will begin my analysis with a study of Elinor Ostrom’s work on how the “tragedy of the commons” (Hardin 1968) can be overcome through collective action. Here, I will focus on the importance of micro situational and interpersonal values of trust, reputations and reciprocity for collective action. I will then discuss her eight design principles for the sustainable self-governance of common pool resources in polycentric systems. In a second step, I will turn to the more theoretical work of Vincent Ostrom and analyse both his analysis of the threats to democracy and his more general understanding of democracy as a mode of associated living (V. Ostrom 1997; cf. Dewey 2012). With this foundation, I will elaborate on the Ostroms’ concept of public goods and the public economy as an alternative to “machine politics and boss rule” (V. Ostrom 1991). After having presented the outlines of their work, I will, in a third step, discuss whether the Ostroms’ model of nested, polycentric self-governance can adequately deal with the multiple crises. In order to overcome these grave problems, I will suggest that their theories of democracy and the commons should be enhanced with a concept of “counter-democracy” (Rosanvallon 2008) as resistance against policies and regimes that support enclosures and privatization on the one hand and with a further democratization of economic activities and institutions on the other hand.
Several regions in Germany are characterized by a relatively large amount of forest land in the hand of traditional forest communities – which usually show a cooperative character. Due to different origins and objectives, the group of these traditional forest communities is very heterogeneous. As well, the commonly owned forests show very diverse patterns. Until now, little is known about the factors influencing this diversity. Many traditional forest communities are inseparably linked to coppice management by historical reasons (production of charcoal and tanbark). Until today, a number of communities still uses coppice forests for the production of fuelwood, although the proportion of other forest types is much higher. The Management of coppice as well as the large variety of forest patterns suggest effects for Nature Conservation. If so, these traditional forest communities may contribute to Nature Conservation efforts linked to the Convention on Biological Diversity (CBD) and national biodiversity strategies.

This paper documents the results of a study on 12 different traditional forest communities in two regions in Germany (covering Saarland, Rhineland-Palatinate, and North Rhine-Westphalia). Methodically, interviews, forest structure assessments and analysis of forest inventories as well as remote sensing data were used. The findings on forest structures as well as history, development and objectives of the communities are presented. Moreover the causes and possible effects of these structures are discussed. The communities provide different forest types, including active coppice stands, over stood coppice stands as well as high forests. These forests offer structures relevant for Nature Conservation on different scales – from tree to forest stand level up to landscape level. Many of these structures are rather caused by historical and traditional forest uses than by the form of ownership. In other cases, it is shown that the commonly forest ownership with its decision- and management system may directly influence forest structure diversity – and thus induce benefits for nature. On this basis, relevant factors concerning decision making and the management system are presented. Moreover, it is discussed to what extent the provision of forest communities in Europe may foster Nature Conservation effort.

Analysis of multi-layer institution and governance factors in Japanese Satoyama and Community forestry program of Nepal
Bidur Khadka (Yokohama National University)
The Socio-ecological System (SES) framework is a framework developed by Elinor Ostrom (2007:2009) to help accumulate and synthesis knowledge about social-ecological systems, particularly about self-organization in common pool resource management. Institution and governance are the major tools for sustainability of commons in any socio-ecological landscape. The satoyama and community forestry concept are the landscape management concept from local community especially in rural area. There are different common aspects and differences in the concept of satoyama and community forestry program such as satoyama concept is developed as a different objectives living harmony with nature, education, recreation, cultural heritage, health and welfare. But in case of Nepal community forestry, main objective is livelihood improvement, decentralization and devolution of power to local people. Although the concept is difference but overall management system, governance structure and institution process are similar. This research is focused on how multi-layered institution and governance attributes affects in the sustainability of satoyama and community forestry program. This research is analysed from four different landscape case studies from Japan and Nepal. The two case studies Nanasawa satoyama and Hadano Naganuki satoyama is selected in Kanagawa prefecture, Japan and two case studies form Nepal as Surya Binayak community forestry and Bhagawati community forestry Nepal. The methodology used to accomplish the research are focus group discussion, key informant survey, expert discussion and review of literature. This research helps out to understand the institutions arrangement system and governance system in satoyama and community forestry and it can also explore the possibility to replicate in community forestry model.

The determinants and performance of Public Service Industries in Environmental Governance
Andreas Thiel (Humboldt University, Berlin)
Christine Moser (Leuphana University Lüneburg)
Anja Betker (Humboldt University, Berlin)
Nadine Schröder (Humboldt University, Berlin)

In this contribution we aim to operationalize the analysis of polycentric governance for different kinds of resource systems. For this purpose we first review the writings on polycentricism for distinguishing polycentric governance as a phenomenon and as a research approach. The latter suggests that governance configurations depend on particular constitutional rules and social problem characteristics. In this paper we particularly aim to investigate the role of the latter for configurations of governance and their performance. For this purpose we re-visit the concept of the public service industry. Subsequently, we spell out what specific characteristics of social problems shape public service industries in particular ways. Specifically, in regard to the latter we hypothesize about the way characteristics of social problems shape governance mechanisms, i.e. physical and non-physical exit from a jurisdiction, voice, and self-organisation. Further, we highlight the role of accountability for the functioning of these governance mechanisms. Next, we apply this analytical frame to the analysis of European Marine, Freshwater and Renewable energy production governance. The underlying purpose of this comparison is to verify hypotheses about the way characteristics of the particular goods and services that these public service industries provide. Particularly, we highlight the role of place-specificity, rivalry and jointness of production in the way governance configurations distinguish themselves as duplicating, alternating and coordinating. Correspondingly, possibilities by citizens to take influence on these governance constellations...
largely differ. The latter could also be corroborated empirically. The field data for the work underlying the paper is the result of detailed, interpretative, case study work on all three cases.
Revisiting Agri Value Chain Financing for Small Holdings in India: A global problem and Local Solution
Piyush Kumar Singh (Development Management Institute, Patna)

Agriculture remains predominant occupation despite the decline in its share of GDP from 14.7% in 2009-10 to 13.9% in 2013-14 at 2004-05 factor prices as the employment share in agriculture sector fell over the same time period. Apart from the meteoric growth rate experienced in ICT industry, the decline in agriculture growth rate as percentage share of GDP can be mainly attributed to fragmentation of land holdings. The land holding have decreased from 1.69 ha in 1985-86 to 1.1 ha in 2010-11. Currently, 63% farm holdings (below 1 ha) belong to marginal farmers while over 86% are less than 2 ha accounting for nearly 49% of the operated area. Such low average size holding sizes force these farmer group to continue to live below poverty line leading them to face significant economic and social deprivation particularly in terms of quality of life and access to basic services. The situation may further worsen because of the higher population growth rate and unpredictable climatic conditions that impact the agriculture productivity. The best way to address this problems is by transforming the farmers from traditional individual growers to self-reliant collective agricultural producers.

One way to accomplish self-reliant collective producer groups is to design, implement and operate an efficient value chain mechanism. Effective value chain mechanism offers substantial benefits to its various stakeholders in forward and backward linkages, increased market access, reduction in risk through diversification because of collectivization and allows to achieve scale economics in operation. Apart from promoting collectivization for self-reliant, financing of the value chain assumes a key role in the effective functioning of the member owned enterprises. Hence, it is imperative to understand the comprehensive agri-value chain financing model to provide a cost-effective solution for small and marginal farmers in rural areas. Value chain financing in rural sector is affected at each step of input accessibility, marketing and processing. The key constraint is lack of financing services and their integration at various level of value chain. Financial institutions often view smallholders as unattractive clients as their land are collateral, high levels of informality and adverse effect of external factors (weather and price fluctuations). However, they often have access to financing from input suppliers and/or buyers through agri-value chain.

Therefore, this paper examines the roles and importance of agri-value chain financing in context of small holdings of India. This study explores the various linkages of agri-value chain and suggests various successful models of agri-value chain financing based on certain points i.e. identifying agri-cultural and allied sectors with growth potential based on demand; structuring financing arrangements with prime focus on producer driven model; develop models that directly link small producers with formal financial institutions; piloting crop insurance programs to mitigate the risk; refine and replicate successful agri-value chain financing models. This study also advocates that inclusive agri-value chain financing is be a better financing practice, which if implemented at the ground level would effectively enhance the agriculture productivity and farmers’ well-being.
The contributions of the commons to food sovereignty in Europe: a case study of Campi Aperti and Genuino Clandestino, Italy

Dagmar Diesner (University of London)
Marina Chang (Conventry University)

Peasant farmers, small-scale producers, consumers, food activists and academics across the global North and the South formulated food sovereignty and formed the umbrella organisation La Via Campesina to set against the neoliberal agenda of food security in the international arena. In addition to being one of the largest and effective global organisation encountering the global financial and trade organisations (Dalla Costa, 2007), it has reshaped theirs own social relations within opening up to rights’ of gender, indigenous and fisher folks.

The preservation of a local food culture has become in the past two decades an increasing struggle in Europe in which new avenues have been explored by local farmers, small-scale producers and consumers alike to maintain and protect the local food diversity. In Europe the Common Agricultural Policies (CAPs) have been aligned to global agribusiness squeezing out the local farmers/producers making it ever harder for consumers to purchase local, seasonal and healthy food-stuff. However, within the neoliberal CAP-system, the multi-functionality approach presents a small window for the European peasants to intervene with the approach of food sovereignty.

In this paper we will illustrate the paradigm of food sovereignty and its realisation on its guiding principles. Land, seed and the local economy are the key means to implement food sovereignty, and it is this autonomy to maintain over one’s own food production along with its own method of cultivation and what to cultivate. Land and seed are not simple commodities that can be parcelled up and sold to the highest bidder under the cycle of commodification and re-regulation in the financial arena; it is a social relationship composed of multiple dimensions and expressions through peoples’ knowledge and stories passed on from one generation to the next (Borras Jr. 2006)

Food sovereignty is realised through associations and networks in local areas through a horizontal matrix. Through our case study, CampiAperti, Bologna and their campaign Genuino Clandestino across Italy, we will illustrate how commons regimes operate in terms of self-management of their self-certification process for organic products. This is a common collaborative process between local producers/farmers and consumers that has re-established a relationship of trust, cooperation, reciprocity and co-dependency. From the bottom-up perspective this seeks to highlight the mergence between the managerial and political commons. The paper will further explore how the commons can contribute to food sovereignty to build a coherent force for change.
Globalisation affects forest management by accentuating economies of scale. Global scale actors who are not embedded in local institutional arenas may challenge local institutions’ ability to effectively govern forest resources and landscapes. In Europe there are many examples of forest commons providing a wide range of arrangements between and even within countries. In Sweden, Slovakia, Slovenia, Romania and Italy we find examples of traditional forestland communities, while new types of community woodlands are emerging in Scotland, Wales and England. The survival of forest commons in Europe under a new set of vulnerabilities depends on an institutional capacity to learn and adapt to ongoing changes. Forest commons provide interesting examples of adaptive behaviour and offer promising learning experiences. We argue that CPR regimes can drive purposeful institutional change for sustainability by introducing social innovation.

Drawing on FACESMAP Cost Action comparative analyses and Latin American experience, the panel will (I) analyse robust governance across diverse forest commons regimes and (ii) conduct conceptual discussion to understand factors essential for forest commons survival and essential innovative models for sustainable management under global market pressures such as social enterprises, climate change adaptations, and ecosystem service governance.

**Paper Contributors:**

**The role of forest commons as drivers of social innovation (in Italy): new wine in old barrels?**

Laura Secco (TESAF University of Padova)
Paola Gatto (TESAF University of Padova)
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Matteo Favero (TESAF University of Padova)

Nowadays, EU is facing intense economic and societal challenges, exacerbated by the financial crisis and major budgetary constraints. As a consequence, a new growth strategy based on mobilizing people’s creativity for a smart, sustainable and inclusive Europe by 2020 is under development. In this strategy, social innovation (SI) is considered an effective way to develop novel solutions behind technological innovations, to make better use of scarce resources, and to promote an innovative and learning society. SI might include new institutional environments and arrangements, new actors’ relationships and interactions and new fields of activity, such as social entrepreneurship/enterprises, that contribute to enhance the quality of life and human well-being.

Local institutions like Forest Commons might play a relevant role in promoting and supporting many SI mechanisms, especially those based on interactions among private and public actors, horizontal networks and social capital. Adapting their ancient Statutes and/or their internal
informal rules, some Italian Forest Commons have been effective in adopting new forms of SI and governance modes that seem to be effective in dealing with the emerging societal and environmental challenges that nowadays affect EU rural landscapes (e.g. inequity issues, unsustainable uses of natural resources, landscape abandonment, etc.). On the basis of case-studies located in the north-east of Italy, this paper aims at preliminarily identifying and analysing the role that Forest Commons can play as drivers of SI in Italy.

**Local-distant owners’ relationships in governing the common pool resource: Agrarian commons in Slovenia**
Tomaz Czerny (University of Ljubljana Biotechnical Faculty)
Andrej Udovč (University of Ljubljana Biotechnical Faculty)

Co-management of natural resources in the form of agrarian commons (AC) has been restored after Slovenia’s independence in 1990s. The main objective of this research was to determine whether the perceptions of local and distant members of the agrarian common are different in terms of management as well in relation to the environment. In this respect we surveyed the members of the agrarian common Škrbina-Rubij-Šibelji. We were expecting the management goals of active members to go in the direction of increasing the economic efficiency of the resource. Activity of the AC members was determined by several aspects: participation in AC meetings, their contribution of new ideas and the willingness to invest their own funds in AC. Most members of AC, which are active in terms of participating at meetings, live on the territory of the AC (95.7%). Also, in aspect of contributing new ideas were members living in the area of active AC more active, as members living outside the area of AC. The latest have in the last three years not contributed any ideas to the management of the AC. On the other side it is true that the members living in the area of AC are less willing to take risks in terms of the contribution of their own funds in the AC, as a greater proportion of members living outside the area of AC are prepared to invest their own resources in the operation of the AC with the expectation of better returns. Undoubtedly, the willingness to invest their own funds in AC is associated with the fact that most members who regularly attend meetings are also living in the area of the AC and for them it has already been found to be more cautious when investing in AC. Similarly it is with the opinion whether it could be earned more from operations of the AC. The passive members are in this opinion more optimistic. Thus, 80% of members who do not regularly attend meetings of the AC have the opinion that it would be possible to get more profit from the AC’s operation. Their opinion on the other side shares only 56.3% of the active members.

Most members of the AC that have not been active in terms of participating at the meetings have nevertheless contributed their ideas to the management of AC over a period of three years. On the other hand, among the members who regularly attend meetings of the AC there are 21.4% of the members who contributed ideas to the management of AC in period of three years, which indicates that the members of AC, which are regularly attending the meetings of the AC have higher interest in co-management.

In general the analysis shows that the management objectives of local and distant members differ especially in terms of management, less in relation to the environment. In principle, we see that active members of agrarian communities prefer economic objectives, while passive members are more interested in the environmental objectives.
Commons sustainability and survival in Portugal: the great challenge posed by commoners’ demographic decline and aging
Miguel Sottomayor (The Portuguese Catholic University)
Américo Mendes (The Portuguese Catholic University)

Common lands in Portugal are millenary institutions, probably much older than the country’s nine centuries of existence. They covered important extents of the Portuguese territory in the past, but are now reduced to as much as 490,000 hectares and 1,100 units, situated predominantly in Northern and Central Portuguese rural areas. Traditionally common lands main functions were to complement commoners’ agro-forestry private units with pastures, biomass for animal beddings, and fuel wood. Nowadays, as the new agricultural systems no longer use such resources, common lands are mainly used for forestry, mineral extraction, leisure activities such as hunting, and hydro/wind energy production. Since c. 1980 the Portuguese rural population also started to decline and age at a fast pace. These two context changes posed considerable problems for the traditional forms of governance and labour sharing of common lands that continue to be amongst the main causes of the productive decline and environmental deterioration of common land resources. In this paper we aim to give a historical view of the main attempts to overcome this common lands governance problem due to context changes, with a particular emphasis on solutions involving new forms of common land governance, new productive orientations, as well as the succession of governmental policies targeting common lands in Portugal in the recent past. We examine how the interplay of the three processes mentioned above (demography, policy and technological change) has affected the kind of social capital needed for the sustainability of these common lands. We conclude proposing “business as usual” scenarios for the Portuguese commons in the near future, say 20 years, and addressing the major policy implications of such scenarios if the commons survival is to be attained at all.

Community rights over forestlands in Latin America
Leticia Merino Rice (Universidad nacional autónoma de México)

Communities’ access to rights over forest commons has been largely advocated as a way to pro-mote conservation and development, the Durban Conference on Climate change even recognized local community rights as a climate policy. Conservation of Latin American forests has global relevance as it is the region of the world with the highest bio-diverse tropical forests, 98% of the forest area being natural forests, containing five out of the ten global bio-diverse “hot-spots”. Latin American is also the region of the world with the largest share of community owned forestlands (32%). LA contributes with 47% of the CO2 emissions from deforestation, due to the rapid growth of highway networks, agro-industrial expansion of soy, mining and oil drilling. Research and experience show that under the right political circumstances, secure access to forests offers an opportunity to alleviate poverty and create an informed local environmental citizenship nevertheless Latin American experience shows that community tenure is a necessary but insufficient condition for community forestry success, often blocked by incomplete “devolution” policies. This work argues that in order to be meaningful ”devolution” of rights to local communities needs to translate into: livelihoods and into capacities to govern forest commons. In this sense community forest policies in LA are failing at least in three senses:

a. Community forestry is not seen as a sound strategy for conservation but as a threat to the forests. In all countries where decentralization forest policies have taken place (Mexico,
Guatemala, Nicaragua, Peru, Ecuador, Bolivia and Colombia) communities have to access forest areas, with-draw forest resources for domestic consumption and co-manage forest areas, they do not, how-ever, have rights to withdraw or manage certain resources for commercial purposes - particularly timber - without approved management plans. Regulations often discourage forest management efforts, encourage illegal or unsustainable practices due to high transaction costs related to compliance with the law. On the other hand communities with logging operations, generally lack financing and technical support while being forced to compete in globalizes markets.

b. All over the region central governments retain control of the subsoil; while national economies are highly and increasing dependent on minerals and oil. Mining and drilling concessions have in-creased at least two fold over the last two decades.

c. Finally communities’ exclusion rights need to be enforced by the States in contexts of illegal logging, drug traffic, anti-drug military activities, land-grabbing, corruption and weak systems of justice, but most States in the region are failing to do so, tending to be more interested in regulation - often with conservation goals - than in protecting community rights.

The task and the required strategies are proving to be more complex than initially proposed, making community rights effective demands a clear vision of the potential of communities’ engagement in conservation, as well as political will and civil engagement at local, national and global scales.

Enhancing the well-being of EU regions by innovative governance models: Carbon forestry CPR regime

Stanka Brnkalakova (CE SPECTRA: Institute of Forest Ecology)
Tatiana Kluvankova (CE SPECTRA: Institute of Forest Ecology)
Michael V. Marek (CzechGlobe - Global Change Research Centre, Academy of Sciences)

Mountain landscapes face unique global change challenges but also offer opportunities for sustainable development, thus such landscapes have represented a top policy agenda since the Rio Earth Summit in 1992. Climate regulation represents an important ecosystem service and a tool that contributes to meeting CO2 mitigation objectives. Carbon sequestration is a natural process that significantly contributes to climate regulation by the capture and long-term storage of atmospheric carbon, the main greenhouse gas, in all ecosystem types. Temperate forests in European mountains are a significant world carbon stock, and therefore place mountain regions in a prominent position in climate change adaptation policies. Ecosystem services as public or common goods face the traditional social dilemma of individual versus collective interests often generating conflicts, overuse, and resource depletion. In this paper, we analyse carbon sequestration in mountain regions as an innovative forest management approach to addressing responses to global climate impacts. Furthermore, we analyse how resource regimes contribute to the effectiveness of management, in particular whether self-management and self-governance can increase innovation capacity, without external authority being needed to resolve the resource management problems. The potential of global climate regulation ecosystem services to improve the well-being of mountain regions will be demonstrated in European continental mountains in particular in Slovenia and Slovakia. The paper demonstrates how carbon sequestration resource regimes contribute to the resilience and well-being of mountain regions, and can be considered as a governance innovation to scale down CO2 objectives from global to local policy arenas.
#B24 – Influence of European & international forest policies, investments & discourses on local contexts & counter-responses
Wednesday 11 May 2016, 08.30-10.30, Hallerstrasse 6, Room 203

Panel Convenors:
Lysann Schneider (Institute of Social Anthropology, University of Bern)
Annina Aeberli (Centre for Development and Environment, University of Bern)

From a historical perspective, the panel will look into how the European and international way of dealing with forest matters affects local contexts, influences national state frameworks on forestry and into how communities respond to it. The presentations will shed light on the discursive elements coined by Europe such as illegal logging, sustainability, forest governance, protected areas, forest restoration, recreation, logging, timber as driver of economic development and on how they reappear in specific local contexts. They will, furthermore, focus on impacts of European and international action under laws and pro-grams such as REDD as well as the impacts of European investments in specific situations. How are local discourses, policies and livelihoods influenced by the mentioned elements? The presentations will highlight how a certain type of dealing with forests is anchored in power structures and is legitimised. The analysis is based on concepts of political ecology.

The panel will furthermore highlight how these policies, investments and discursive elements are adapted and reinterpreted in specific contexts as well as into how local communities respond to them. It will bring up issues such as collective action within specific national forestry frameworks and forest discourses inspired by research done by Elinor Ostrom and Arun Agrawal.

The panel also aims at a historical perspective. A lot of European countries were colonial powers in countries of the South. Some of today’s forest laws and policies in countries of the South can be traced back to colonial times and reflect European perceptions of forests from that time. Today’s forest policies of many countries of the South are influenced by their colonial past. The dominant understanding of forests as timber producers interlinked with their perception as driver of economic growth roots in colonial European understanding and today, policies of neo-liberalization have been pushed by Western countries in countries of the South. Also the other dominant inter-national discourse, the environmental discourse, that perceives forests as places that should re-main untouched by human beings, finds its origin partly in Europe.

Paper Contributors:

From the Maya Forest Gardens to Privatized Timber Business. International Influences on Forest Resources and Social and Environmental Transformation in Mexico
Lysann Schneider (Institute of Social Anthropology, University of Bern)

The contribution will present the different systems and perception of forest use and management in Mexico before and after the Spanish conquest. Mexico stood about 300 years under colonial power of Spain and in many parts of the country the indigenous way of resource use did not survive. The contribution will trace institutional change in the management of common pool re-sources, explain the impacts on the local level and relate these changes to
the impact on climate change in the area: From a historical perspective, I will give an introduction focusing specially on the legal form of common property of forestry and gardening areas to state property and privatisation. The traditional forest management of the indigenous Maya based on communal property systems and the different valuation of forest use and management including non-timber forest resources as conservation strategy was one of its features. The remains of the colonial period and until today still dominant European influences will be shown on the example of the north-eastern part of the peninsula Yucatán where the last continuous forest area were used for the extraction of rubber and bloodwood trees. In the middle of the 20th century the forest were discovered for logging of tropical tree species. A colony was established and a later successful regional timber company promoted in this area with the main objective to produce wood products for the international market leading also to material gain locally. This type of dealing with forests as the previous commons is anchored in national and international ownership and power structures and thereby legitimized as it contributes to the national benefit.

This section seeks to apply new institutionalism approach analysing the external historical changes in the value of an area or a resource context that influences bargaining power of actors in a local context and the way they choose and shape institutions (e.g. property rights, rules and regulations) and how they legitimate an institutional selection. It asks how these changes influence actors’ strategies: The state and commercial oriented external users were attracted by the timber to be used, while in marginal areas common property institutions were maintained based on ejido regulations by which common pool resource such as forests managed by communities as a common property. The major institutional change came in the mid-20th-century when forestry resources were rising in relative prices and attracted commercial interest, followed by privatization as institutional choice of actors with more bargaining power. These were then able to transform the landscape via commodification of the forests and established a factory attracting wage labour from which local people also profited as long as timber could be used. As the area have been mainly cleared of forest cover people realize that not only locally their previous cultural landscape is being reduced, but that they will be more vulnerable under condition of climate change such as great heat and dry conditions lead to fire and storms reducing the attractiveness of reforest the area.

Keywords: Maya, forest gardening, timber business, institutional change, climate change

Forest discourses and policies in Sarawak, Malaysia: European roots and local hybridizations
Annina Aeberli (Institute of Social Anthropology, University of Bern)

The Malaysian state of Sarawak on the island of Borneo shows many particularities with regards to its history of forest discourses and policies. For a century – from 1841 to 1941 – it was governed as a private colony by the Brookes, British adventurers, with weak control over forests. It only came under official British rule after the Second World War in 1946. After its late independence in 1963, the state of Sarawak retained its autonomy over natural resources, except for oil, but including forests, within newly formed Malaysia. Various scholars as well as a lot of indigenous people from Sarawak distinguish between the British time, when native rights to land and forest were respected, and a post-independence time, when their concerns were neglected and their land and forest appropriated by the state. This presentation will argue that many elements of forest policy and discourse in post-
independence Sarawak are rooted in British rule. It will also discuss how these British concepts and in post-independence also Western concepts of forest have been hybridized locally. While native customary rights over forests formed the base of the Brookes’ rule, they nevertheless step-by-step introduced European forest concepts that have structured Sarawak’s dealings with forests until today: Early on, the legal base was laid for today’s practice that all land is state land except if proven differently by natives. The regularisation of forest usage, the demonization of shifting cultivation, the exclusion of natives from conservation areas as well as legal forest classifications can also be traced back to this time. Most importantly, the forest became a natural re-source.

Under the very short time of colonial rule, the British installed all the main features that had been lacking from their perspective for a professional European-style management of forests: they introduced the German model of forestry based on the principle of sustained yield and inventories of forest resources. They also brought new technologies for timber extraction to Sarawak that allowed the industrial timber extraction to take off from the 1960s on and set up first land development schemes. Finally, they enacted the two most important ordinances that have governed forests until today: the Sarawak Land Code and the Forests Ordinance of 1958. Most of Sarawak’s post-independence was shaped by its long-term Chief Minister Taib Mahmud, whose forest policy was mainly guided by a hybridization of the Western development paradigm of economic dualism. His successor Adenan Satem has introduced new policies and discursive elements around ‘illegal logging’. This is a term heavily coined by the European Union and defined as harvesting of timber in violation of national laws. Adenan has compared illegal logging to a ‘dis-ease’ and ‘robbery’ and stresses revenue losses. In 2015, he substituted the colonial Forest Ordinance and heavily increased penalties on illegal logging. The indigenous peoples’ usage of the term ‘illegal logging’, however, differs: according to their understanding, logging is illegal if it is practiced on their claimed land without the community’s permission.

Keywords: forest, colonial history, indigenous peoples, hybridizations, illegal logging, native customary rights, discourse analysis

Neo-liberalization in Senegal’s Forestry: Domination through and Local Resistance against Globally-shaped National Practices
Papa Faye (Initiative Prospective Agricole et Rurale Senegal)

The presentation will deal with the evolution of rationalization of domination in Senegal and brings out its relations with the dynamics of global economic and environmental policies. It also shows how peasants resist against foresters’ instruments of control and against the corresponding new forestry practices. From the colonial period to date, the Forest Department has been strictly con-trolling and monitoring access to commercial forestry, charcoal in particular. During the colonial period, local access to forest has been tailored to French citizenship, a status that profited to a limited number of privileged Senegalese autochthons. After independence, starting from the 70s, the charcoal market was open up to a limited number of cooperatives formed by Senegalese citizens (mostly urban). At the end of 90s, with the wind of participation and democratic decentralization, the Forest Department “opened up the forests” for rural people, through the formation of village-based committees. This was the era of popular participation, which ended following the movement towards neo-liberalization of forests that has been initiated in Senegal in the middle of the 2000s under the lead of a project funded by USAID. With neo-liberalization, profit-based user organizations (known as
groupements d'intérêts économiques or GIEs) now have substituted the village committees. The assumption beneath that policy change is that GIEs would develop a sense of rural entrepreneurship and would generate enough economic local profits in a way that would increase peasants' attention to resource conservation and governance thereof, more than any foreign actor or any non-profit organization would do. The organization of peasants into village committees and later into GIEs can be interpreted as elements of the repertoires of control that have been long enacted by the Forest Department and their projects to maintain and expand its authority over forest access and management, charcoal in particular. However, local people have also been reacting against the instruments and the rules aimed at controlling their access. They do so by withdrawing from committees and now from GIEs. While withdrawing from organizations enables them to escape from the exaggerated technical oversight exercised by foresters, promoting individual charcoal production widens their margin to access the reputed uneven-playing commercial forestry market. Therefore, the withdrawal from those instruments and the promotion of individualism by local people can also be analysed as forms of repertoires of resistance against domination by higher governance bodies and against the top-down understanding of privatisation.

Keywords: Decentralization, Participation, Neo-liberalization, Forestry Practices, Domination, and Local Resistance

**Governance of forest recreation: the challenge of managing and planning forest recreation in urban forest areas**

Jerylee Wilkes-Allemann (ETH Zürich)

Forests in Switzerland are multifunctional. Forest recreation is regarded as one of these multifunctionalities. Forest recreation is given because forests for recreation are defined under federal law (article 699 of the civil code) as being an open-access common-pool resource. And subsequently being open for every single person who visits forests by foot at any time without regard to ownership (public and private). However, the open-access common pool resource definition of forests for recreation possess challenges to forest managers and policy makers, at least when considering urban forest areas in agglomeration regions as the main unit of analysis. The challenges forest managers and policy-makers are facing and to which we refer are liability issues, costs issues, conflicts issues. Subsequently and in order to improve the planning and management of urban forest areas the governance of forest recreation has to be analysed. This is done by using the Institutional Analysis and Development (IAD) framework, developed by Ostrom and her colleagues (1990) to investigate open-access and common-pool resources. Through the application of the IAD framework we expect to identify all relevant action-situations in forest recreation planning and management, to identify the stakeholders who need to be involved in each action-situation, to identify the institutions which frame the process and subsequently to describe the outcomes which result from the stakeholders’ interactions. To do so, case studies were selected based on the criteria: biophysical world (intensity of recreational use of forests among others), community attributes (population growth, ownership) and rules-in-use (Cantonal Forest Development Plan). The research draws on several empirical sources including national forest inventory data, national statistics, semi-structured interviews (May, 2001) and peer-reviewed papers.

The findings suggest that the governance of forest recreation is very heterogeneous and strongly constrained by local circumstances. Therefore having insights from other parts of Europe or beyond facing similar challenges as the ones presented is strongly recommended.
Implementing REDD+ Policy in Indonesia: Significant Changes Achieved or just a Paper Tiger?
Rahel Jud (Institute of Social Anthropology, University of Bern)

The focus of my presentation is on the implementation of Indonesia's REDD+ policy, and my main interest lies with the way and the extent to which local projects proceed to (or fail to) safeguard indigenous people's rights, and their impacts on local communities and livelihoods.

After China and the United States, Indonesia is the third largest emitter of greenhouse gases. 80% of Indonesia's emissions come from deforestation – slashing and burning and forest degradation. Since the Bali climate conference (COP 13) Indonesia strives to be recognized as an active climate policy player. Therefore, the Bali Action Plan was developed. This was also the ignition of implementing the Reducing Emissions from Deforestation and Forest Degradation (REDD+) policy. Indonesia has been promoting the REDD+ policy under the UN Framework Convention on Climate Change to reduce its land-use-based greenhouse gas emissions. The largest bilateral REDD+ projects have been agreed with Norway and Australia. In May 2010 Indonesia signed a Letter of Intent with Norway, according to which Norway, depending on the reduction of the emission, will provide one billion US Dollars over five years.

Since the implementation of the first REDD+ projects in Indonesia the effectiveness of this policy has been strongly criticized. According to the farmers’ association Serikat Petani Indonesia farmers and indigenous have lost access to 26.6 million hectares of forest and land. Although the constitution theoretically protects land rights for the benefit of people, in practice, the state authorities retain the right to grant concessions for the use of land to the industries. In addition, the situation exacerbated as well, since mechanisms for recognition of traditional land rights have never been developed in Indonesia.

This leads to the assumption of REDD+ as a major thread to the ability of local communities to access land due to the general trend of privatization of nature as a conservation mechanism. Despite REDD+-related forest governance policies, conflicting claims regarding land tenure remain still unsettled. As a matter of fact numerous forested areas are subject to clashes of different authorities as a consequence of overlapping and competing land claims.

Keywords: Policy change, REDD+, tenure insecurity, Indonesia
# B25 – The spiritual dimensions of commons – missing link in scientific and policy debates?
Wednesday 11 May 2016, 16.30-18.30, Hallerstrasse 6, Room 203

Panel Convenors:
Beat Dietschy (Bread for All)
Josef Estermann (University of Zürich)
Stephan Rist (Centre for Development and Environment, University of Bern)
Bruno Stöckli (Bread for All)

Commons are increasingly recognised by research and policy makers for the high relevance they have for organizing locally based, but globally articulated, poly-centric forms of governing societies and nature beyond the market and the state. However, the increasing recognition of their potentials for creating more sustainable futures is still quite static and essentialist: Although thousands of case studies demonstrate the institutional and political feasibility of CPRM in highly complex and heterogeneous settings, the cultural processes related to their maintenance, defence, weakening or expansion are not yet figured out well. This becomes even truer, if cultural processes are analysed as closely linked to spiritual practices and principles, which play a crucial role in reaffirming, transforming basic values entailed by the lifeworld of people related to the commons.

This panel will therefore address the role of spiritual practices related to different cultural groups struggling for defining existing, or creating new commons related to key natural resources, such as the atmosphere, land, biodiversity, water and also local forms of knowledge related to them.

This means to also asking if there are commons-specific ontologies and related alternative notions of “development” e.g. “vivir bien”, that would allow to better grasp with the missing links between spiritual practices and principles, the life worlds of commoners and the specific institutional dynamics and transformations of their common property rights regimes and the ways they articulate with the wider societal structures?

The question if there are inter-culturally similarities of spiritual practices is based on case studies on the links of spiritual practices of indigenous people from South America, native nations from Africa, Canada, and India, adherents to liberation theology and deep ecology in Europe. What are the implications of considering spiritual implications of the commons for research and policy aiming at supporting them, is another question of this panel.

The guiding question of the panel is: Are there patterns of collective action that are conductive for the re/creation of commons? The preliminary answer is: Collective action for the re/creation of the commons has a role to play in the – not yet sufficiently acknowledged – spiritual resources of tradition, emancipation, transformative spirituality and Cosmo-vision.

Paper Contributors:

Minority group participation in resource governance in the UK
Chamu Kuppuswamy (University of Hertfordshire)

This paper relates to National Parks in the UK (a type of commons land) and its use by minority communities that live around the National Parks.
Vasudeiva Kutumbhakham (VK) is an alternative notion of development applied by a Hindu/Indian group in the Peak District National Park to participate in resource governance. This paper will explain the philosophical concept, starting with Hindu environmental philosopher Dattareya’s views on nature, and elaborate on the concept of oneness and interconnectedness of being as the highest philosophy.

Through the ranger training programme (2010-11), Mosaic (2012-ongoing), HLF Indian Heritage in the Peak Programme grant (2012-2014), AHRC Cotton connected communities programme grant (2014-2015), Sustainable Development Fund (2016), Hindu Samaj, working with the National Park authority, Universities of Sheffield and Nottingham has increased Indian visitors to the National Park and participated in governance. This paper will elaborate on the projects undertaken by the group such as guided walks, visitor centre reinterpretation, consultations and environmental awareness and governance from a Hindu perspective and how it contributes to the Authority and whether the Authority values them, since this latter point is crucial to strengthening alternative development concepts in management and governance of our ecosystems and commons.

In the South West Peak project which is currently underway, the Authority is involved in mapping ecosystem services and consults with minority community groups. The Authority is taking an eco-system approach from CBD 1995 as interpreted by the Authority. This paper makes the argument that had alternative spiritual concepts been taken into account, the ecosystem approach would have been almost up to date to match the SDGs of 2015, well before 2015! An even more mature understanding is still possible to not just make the eco-human connection visible, which is what the SDGs do, but to address the issue of deep interconnectedness which is embedded in VK, thus putting the governance mechanism even ahead of SDGs!

The bottom-up governance around identification of ecosystem services that is taking shape in the Peak District is as follows:

Peak District Mosaic - Communities Policies manager - Peak District Communities and heritage team - Executive Board

Peak District mosaic is made up of volunteers from different communities in Sheffield, Manchester, Birmingham, Leicester and Derby. Its members come from various spiritual and cultural back-grounds, including black Caribbean communities in Sheffield and Manchester, Indian and Hindu communities in Sheffield, Manchester Leicester and Derby, Muslim Pakistani communities in Birmingham, Sheffield and Manchester. The Muslim and Hindu groups explicitly draw from their spirituality to relate to environmentalism.

The argument for using spirituality in resource governance is that it is often superior to the existing precepts. Principles such as VK have stood the test of time and have been instrumental in harmony between communities and the natural environment in regions such as South Asia. It is also about taking ownership of these concepts as it otherwise gets subsumed in new age thinking. It builds cultural capital for communities in their respective settled countries, promotes cohesion through social justice, and addresses ecological justice.

‘cumaibh suas ur cóir’ - ['stand up for your rights']: towards a Gaelic ontology for governing the commons
Ian Alexander MacKinnon (Coventry University)

In the Scottish Gaelic language the word cóir refers both to a claim of rights and to a quality of character. In both senses the word was invoked in relation to a key historical moment in struggles to defend common land in the Highlands and Islands of Scotland. It was used by the
bards of the late 19th century land risings, both in demand of collective land rights, and also to praise the character of those involved in the political struggle for those rights.

This presentation offers an auto-ethnography of entry and immersion into the particular commons life-world of the Gaels of Scotland, and also a related hermeneutic process of deepening understanding of a Gaelic ontology of the commons. It does so in relation to what I have learned of the traditional practices and principles of one of our ‘liminal spaces’ – the area between high tide and low tide lines – and of learning to conduct myself there in ways that are cóir.

It has been my experience that getting to know the conditions of this liminal space can offer a perspective on one of the basic values and central spiritual demands of wider Gaelic cosmology, a cosmology that has itself has been made ‘liminal’ by historical and contemporary processes of imperialism and ‘decommonisation’. This value and its demand is the need for cóir behaviour in maintaining the wellbeing of the indigenous cosmos.

Can the olive tree speak? The “immortal tree” and the spirit of the commons in Turkey’s Yırca

Semih Celik (European University Institute)

A rather small village in western Anatolia called Yırca, with a population of no more than 400 people, has become one of the most important issues in national media in late October/early November 2014 in Turkey. The main reason behind the sudden interest in the village was the resistance of the villagers to the urgent confiscation of an olive grove, with more than 6000 trees, of 80-100 years of age, to be sold to the private Kolin Group – one of the biggest conglomerates of the country, in close relations with the government – with the purpose of the building of a coal power plant. Despite the resistance of the villagers and activists from outside, and the ongoing court case against the confiscation and the construction project, the company rooted and cut down all of the trees in the first week of November. The court decision that the cutting down of olive trees was against law, came the following day.

In expressing his grief, the local head of the village, Mustafa Akın said the following, before he burst into tears in a live interview with the CNN Turk TV: “The trees will have a say one day, and ask, ‘what did you cut me down for?’” This paper takes Akın’s words and tears as the starting point for a discussion around how non-economic values attributed to components of nature understood as commons, define and determine the ways social groups and societies react to the bad management of commons and natural resources in general. It argues that despite the effects of urbanization and the transformation of meanings and relations around nature especially starting from the second half of the twentieth century, the idea of nature as commons lives up in mythologies and cosmologies built around certain components of nature. Therefore, in the case of Yırca, the olive tree – or with the local conceptualization, the “immortal tree/ölmez ağacı” becomes the medium for debating and reproducing the idea of nature as commons, as in the words of another villager, who defined the purpose of their resistance as “living in dignity, have a clean environment, and to leave the earth that is our common property, to our children and grandchildren.” The paper suggests that the fact that the olive tree itself is considered as sacred and as part of a cosmology constructed over time by local populations, makes the spiritual and cosmological understanding, rituals and meanings around the tree of utmost importance in understanding social conceptualizations of nature as commons, and collective reaction to the cutting down of the trees. The paper will try to conclude with suggestions on how to integrate the local perspective based on such cosmology and valuation, into natural resource and commons management practices.
The presentation will be based on interviews conducted with the villagers of Yırca during and after the resistance and will demonstrate how olive tree is constructed as a sacred part of the villagers' commons through audio-visual material as well.
The Geographical Indication is an intellectual property right (IPR) aimed at protecting denominations related to products that have a strong link to the geographical origin. As such, those intellectual property rights have a collective nature, because the products concerned originate, both from a historical and a geographical perspective, from a territory where resources and know-how are shared among the inhabitants. This inherent nature of this particular property rights explains why there is generally a collective organisation for the management of the GI products.

More than 1340 European products have been registered so far by the European Commission, showing the special importance of this tool for Europe for developing competitive regional niche food products and giving rural area more chance to access global market. EU is currently working on extending the legal protection to non-agricultural products. Such initiatives of protection for regional food products have shown positive impacts on collective management of pool resources at local levels, like biodiversity, cultural landscapes or traditional knowledge. Raising awareness and interest for enrolling the actors in a shared approach of the commons is most often a key success factor for developing and implementing action plans. Therefore, the proposed panel will discuss if there are experiences and which are the perspectives to make use of the collective action initiated for the Geographical Indications products for developing participatory approaches for the collective management of the commons. We will discuss this around some case studies.

Paper Contributors:

The feasibility of a human-rights friendly regime for geographical indications
Monique Bagal (Université Jean Moulin Lyon III)

My paper builds on the “blockage” of multilateral protection of GIs (TRIPS) and the apparent need to transcend the dichotomy between the conception of the protection of GIs by “old world” countries and that of the “new world” countries.

Experience shows that the advocacy for, or indictment against one or the other way of protecting GIs focuses essentially on the philosophy of protection in one or the other territories. As a reminder, the European Union “culture” is to protect industries far too exposed to competition; the American “culture” is to preserve economic freedom of operators and to grant monopoly on a geographical name only where such name has been tested on the market and is recognized by the “public” as having a geographical anchorage. Equally compelling, neither of these philosophies has allowed reaching the most acceptable balance for GI regime. This paper seeks to transcend them. It bets that everything has not been tried yet, at least from a legal perspective. In order to find a common solution and a way forward to multilateral protection of geographical indications, the paper relies on the culture of “human rights”, not really with a view to "moralize" the field of study but more to deduct practical answers deriving from the international human rights law. As a matter of fact, article 15 of the Convention on
Economic, Social and Cultural Rights provides that “The States Parties to the present Covenant recognize the right of everyone [...] to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author”. I will start by showing that members’ States de facto comply with article 15 by treating geographical indications as imprescriptible, inalienable and perpetual rights. I will then find the existence of a moral right attached to “geographical indication” (1) which allows drawing a number of conclusions inspired by article 6bis of the Bern Convention and broadly on the French regime of droit d’auteur: right of paternity and integrity, right to remuneration and resale right. The latter right is of particular importance for the management of the (free) use of European names by American operators who, nonetheless, acknowledge the paternity of the names to Europeans producers (2). The connection to the human rights regime also justifies a certain implication of the State (3). However, I am aware that we are not in the best of worlds and such analysis cannot be disconnected from other rights (laws of States, other human rights, free-trade law and other distinctive signs). It also has to take into account facts and sovereign interests, different priorities. We may not expect the “best of the worlds”, we do not have to resign to accepting the international law of Geographical Indications as it stands; especially, considering the cross-cutting issues that are at stake. It is all about integrating a systemic reflection and existing techniques to reach the “right balance” between commonly agreed interests.

**Defining, recognising, protecting geographical indications: what is the role of the state?**

Erik Thévenod-Mottet (Institut de la Propriété Intellectuelle, Bern)

Geographical Indications (GIs) are ranked amongst the intellectual property rights (IPRs). But GIs have specific features that distinguish them from the main IPRs, trademarks and patents. Indeed, GIs are generally names of places, regions, cities or countries, so the granting of a property right on these names is nothing but obvious, contrary to signs identifying an individual firm, to individual-al artistic creations or to inventions. In other words, the question of ownership is not easy to clarify when dealing with GIs, and is addressed in several ways by the national legislations: in some countries the owner of a GI as an IPR is identified as a private person, and in other countries the owner-ship is attributed to the state. But, even more surprisingly, in many other countries, there is no clear identification of the owner of that IPR. The question is more complex when considering that the collective dimension of GIs is based on a cultural heritage, materialised in a particular origin product whose characteristics shall meet the common expectations of the consumers for that particular origin product. Can we say that a GI is a common good for the producers and the consumers? Then how can these two co-owners coordinate, both internally and bilaterally? Apart from or above the market mechanisms and associations of producers, shall the state play any role?

Both at the national and international levels, different legal conceptions of GIs coexist or are even opposed, that represent a very broad range of theoretical and actual involvement of the state. Thus, although the globalization of GIs as a legal object results from the WTO TRIPS Agreement, the collective dimension of GIs and the way it is or should be regulated is still highly questioned. The long-standing conflict between New World countries and European countries on the international legal protection of GIs, at the WTO and the WIPO, seems to be rooted in a major divergence about the legitimacy and necessity of a state involvement in the management of such a collective immaterial good. The notions developed on the common pool resources are then very helpful for understanding GIs, because a GI is an original
combination between a collective intellectual property and a set of local human and natural resources. Such a combination of immaterial and material commons is not rare nor specific to GIs, but the international legal stakes on the protection of geographical names used as GIs increase with the globalization of trade and therefore require each state to adopt a position on how this combination shall be defined, recognised and protected.

**Geographical Indications and Biocultural Heritage: Opportunities and Challenges for Indigenous Peoples and Local Communities**

Krystyna Swiderska (IIED, London)

Geographical Indications have the potential to protect and promote products based on the biodiversity and traditional knowledge (biocultural heritage) of indigenous peoples and local communities, given that they recognise collect rights and links with particular territories and traditional practices. However, they have been designed for use by businesses rather than indigenous communities and for promoting trade rather than indigenous wellbeing and culture. This paper will explore the potential of Geographical Indications for generating revenue from products based on biocultural heritage, enhancing recognition of indigenous peoples’ intellectual property rights, and incentivising the continued stewardship of biocultural heritage. It will draw on experiences with GIs in India to examine the extent to which indigenous and local communities have benefited; as well as experience with a collective trademark in the Potato Park, Peru, managed by Quechua communities. It will highlight the practical challenges experienced by indigenous and local communities in using GIs and CMs. It will present a proposal for an alternative ‘Biocultural Heritage Indication’, designed specifically to protect the biocultural products of indigenous peoples.

**Building GIs a commons for sustainable development of rural areas**

Frédéric Wallet (Institut National de la Recherche Agronomique, Paris)

This paper addresses the issue of the contribution of geographical indications to sustainable territorial development. Considering a GI as an immaterial commons system territorially articulated to material resources, we mobilize the analytical grid provided by E. Ostrom to analyse how these common resources contribute differentiated ways, to sustainable development of rural areas. The focus is on analysing the governance arrangements for access and management of these resources, which articulate rationale of qualification and differentiation of economic goods and services, and logic of the commons participating in building attractiveness, identity and potentially to the development strategy of these areas. The paper first presents an analytical grid on geographical indications as common cognitive re-sources systems articulated with local material resources; and then proposes to apply it to com-pare different cases of IG in France. Thirdly, the article more precisely explores the long term dynamics of interactions between governance arrangements of geographical indications and rural development project. It comes to show through what governance systems, and processes leading to progressive labelling specification as a geographical indication, the collective building of a territorial resource can feed on territorial development strategies and contribute back to these strategies as a common good.
Degree of collective action when registering Protected Geographical Indications

Xiomara Fernanda Quinones-Ruiz (University of Natural Resources and Life Sciences, Vienna)
Marianne Penker (University of Natural Resources and Life Sciences, Vienna)
Giovanni Belletti (University of Firenze)
Andrea Marescotti (University of Firenze)
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Geographical Indications (GIs) communicate to consumers the reputation and quality characteristics of their food products linked to the geographical origin. Specifically, the collective right of a GI enables producers to defend product names from misuse and imitations, and allow consumers to obtain information concerning the origin and specific attributes of GI products. The registration of GIs, according to the European Union scheme, requires collective action, and considerable efforts born by multiple actors. We analysed the degree of collective action of diverse Protected Geographical Indications (PGI) cases located in developed and developing countries, namely in Austria, Colombia, Italy and Thailand. We used interviews to get to know the PGI registration process, and we also analysed documents to grasp the Product Specifications and national GI regulations in order to understand the scope of collective action. Results suggest that intensive interaction for solving conflicting interests, negotiating quality standards and defining common rules might pay off in indirect benefits and reduced risks expected from GI registration. Additionally, a supportive legal framework but also the assistance of public authorities can back up the community of producers not only in technical aspects, but also in a mediation role, when conflicts seem to be difficult to solve. As there seems to be a positive relation between the intensity and effectiveness of collective action and the likelihood of achieving broadly accepted standards and social interactions needed for successful GI implementation. The presence of robust pre-existing producer organizations is a critical factor along the GI registration process too. Participatory processes along GI registration processes, even if time consuming, can also result in indirect benefits, specifically in terms of trust, social cohesion, and access of small and less-empowered actors such as small producers to the GI protection opportunities.
The year 2015 will have been significant for global environmental governance. The adoption of the Sustainable Development Goals in September 2015, and the potential agreement of a climate change “legal instrument” at Paris in December 2015 have strong implications for the international law of sustainable development. Developments at the global level have often been analysed closely but not necessarily in a comprehensive manner. Thus, the combined impacts of changes in different areas of global governance, such as issues concerning knowledge commons (and their privatisation through intellectual property rights) have not always been seen comprehensively in terms of their impacts on local environmental governance.

The interaction between the global and local in international (environmental) law is of particular importance for the commons. For example, in the water sector, water law has primarily developed through domestic laws. However, the global context is of immediate relevance, since the hydrological cycle does not separate water issues into domestic jurisdictions as the law often does. This has implications not only environmentally, but also in terms of human rights and development. Similar tensions exist over forest ecosystems. As the international community recognised the value of forests to climate change mitigation the need to reform domestic forest law for the global public good has led to complex multilevel dialogues amongst competing forest interests.

This panel will seek to explore the role of law in ‘governing the commons’ and promoting sustainability in the context of the sustainable development goals that will shape development policy for the next many years. The speakers will present on a variety of commons and sustainable development goal related fields, such as water, climate, health, sanitation, and forests. Through interacting with both the international and domestic contexts of law and policy in different subject areas, the panel will further explore the linkages between local and global boundaries that are shared across various ‘sustainable development’ regimes.
Invoking the Rights-based Approach to Ensure the Sustainability of Water Commons – The Indian Experience (cancelled)
Lovleen Bhullar (School of African and Oriental Studies, London)

Adapting to Climate Change & Delivering the Human Right to Water – A Case for a Commons Approach to Water Law?
Birsha Oheddar (School of African and Oriental Studies, London)

Climate change will bring a number of new and complex questions to water resources globally and locally. Freshwater resources are particularly vulnerable to the impacts of climate change, with wide-ranging consequences on human societies and ecosystems. At the same time, many developing countries such as India are still a long way away from providing its citizens water security and ensuring the realisation of the human right to water. As such, there is an increasing call for water law, like other institutions, to adapt to climate change. What remains unclear, however, is how law should adapt and what exactly the human right to water entails?
To answer these questions this research, which is at its preliminary stages, tries to understand water and climate change adaptation from a political ecology perspective in examining the law. Accordingly, it focuses on how socio-economic relations and environmental factors in India interact to produce climate and water vulnerabilities. Such an understanding is important because it enables us to not view climate change adaptation as a simple technocratic set of principles to apply to an otherwise coherent legal framework. Rather, by examining how the current framework is problematic in itself and creates climate change and water vulnerabilities, we can start to think about how we create a legal framework that responds to climate challenges and delivers a human right to water.
The research then turns to look at whether tackling vulnerability and thus ‘adapting’ to climate change and delivering the human right to water can be developed through a commons legal framework. Accordingly, can concepts like the common concern, common heritage and res communis in domestic freshwater law, assist to not only link the g-local issue of climate change, but also to realise the emancipatory potential of the fundamental human right to water.

Knowledge Commons, Health Innovation and Patent Law
Yuan Qiong Hu (School of African and Oriental Studies, London)

The expansion of the patent law regime has profoundly shifted the landscape and boundary of knowledge creation, dissemination, the notion and practices of innovation, including those concerning health. With the global outcry of lacking adequate innovation addressing pressing health needs especially in developing countries on one hand, the doctrine and practice of resorting to proprietary protection as the stimulation for innovation remain predominant. At theoretical level, the discourse of the ‘tragedy of commons’ and ‘tragedy of anti-commons’ have been used in various contexts in illustrating the tension between treating biomedical research as a field of public commons and the economic account to its creation and distribution.
Researches have also shed light on the discontent of having legal enclosure at upfront of generating innovation, which has not achieved the intended objectives of fulfilling the health needs by the public. Yet, patent law which is conventionally national law by nature has been
used in framing and setting international agendas and rules in securing private commercial interest at global level, which also in turn framed the overall perceptions of its function on innovation, including those concerning health in the national context. The adaptation of the Agreements on Trade Related Intellectual Property Rights (TRIPS) under the auspices of World Trade Organization (WTO), and the insertion of patent norms in several of trade and investment treaties have further reinforced the tensions between global and local in terms of the very function of patent law in regards to knowledge commons and health innovation. It also touches upon the development consideration in this context, as enclosed knowledge commons may lead the innovation to be largely monopolistic. The recent United National Sustainable Development Goals (SDG) have set forth a new level of global policy relevance to the issue with the notion of innovation, the role of international trade, and the importance of using patent law rules flexible enough to facilitate the sustainable development especially those concerning health. While the SDG defines the new realm of development policies in the coming decade at global level, the contingency among knowledge commons, innovations and health in the context of patent law regime remains one of the challenges to be tackled. With patent right being legitimized through both international and national laws, the extent to which the boundary of innovation could be redefined in law so that the knowledge commons and scientific creativity would be lifted in reaching public needs is among the critical questions to be discussed. The paper will critically examine the major norms of patent law with focus on how innovation has been defined regards health, the interplay between national and international legal institutions in adopting or interpreting those patent norms, and the nexus and implications of such phenomenon on the realisation of sustainable development goals at national and global levels.

Placing the Seed Commons: Towards Implementing the Zero Hunger Sustainable Development Goal?
Christine Frison (University of Louvain)

Creating a food secure world and reaching the 2015 Sustainable Development Goal (SDG) n°2 'Zero Hunger' require inter alia to "promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge" (SDG Target 2.5). Exchanges of seeds, plant materials, their related information as well as knowledge between farmers, breeders and researchers were a usual practice at the local, regional and international levels until the end of the 1980s. However, the increasing appropriation of (plant) genetic re-sources through intellectual property rights and states' sovereign rights has pushed seeds further and further into the market place - rendering their access (at all three levels) increasingly difficult. In reaction, the agricultural fora within the United Nations and institutions alike created the Multi-lateral System of Access and Benefit-sharing (MLS) of the International Treaty on Plant Genetic Resources for Food and Agriculture (the Treaty) in the early 2000s. The Treaty's overall objectives are food security and sustainable agriculture, to be reached through conservation, sustainable use of seeds and through access and benefit-sharing mechanisms. These objectives are expressly part of SDG n°2.

The Treaty MLS is sometimes referred to as a 'Plant Commons', in which access rules aim at protecting the exchange practices between the above mentioned actors, whether at the local, regional or international levels. This innovative legal framework looks beyond the enclosure of seeds, their privatization and commodification, towards a system that facilitates sharing, best practices and the generation of innovation for food security. It thereby encompasses both private and public interest objectives. Some actors and academic commentators have qualified
the MLS as a commons, but without precisely defining what this concept covers when it comes to seeds. The present paper explores the relevance of this concept of commons with respect to the functioning of the Treaty MLS. In doing so, it assesses whether the current regime reaches food security and promotes sustainable agriculture in the light of the Zero Hunger Goal. It also highlights difficulties and constraints identified by Treaty stakeholders in the implementation of the MLS. Building on this assessment, this contribution makes legal and governance suggestions to help Contracting Parties improve their management of seeds as a commons.
This panel deals with local as well as higher level constitutional arrangements for water management. It first poses the question how on a global level property institutions shall be crafted, by whom this shall be done and furthermore what implications this will have on national, regional and local levels. The panel also deals the SDGs (Sustainable Development Goals) and the implications of this international institutional regime set up by the UN dealing with water. It furthermore poses questions regarding pollution of water by international and national but globally operating companies such as the extractive business. What do international institutions provide as a tool for such local, regional and national governance in the context of a ‘glocal’ world? This panel will provide some insights to these questions.

**Extractivism and the politics of water – the case of Mongolia**

Ines Dombrowsky, Jean Carlo Rodriguez (German Development Institute)

In recent years, resource-rich countries have experienced massive investments, domestic and foreign, in the exploitation of extractive resources. Besides boosting short and mid-term economic growth, a strong focus on extractivism can have drastic negative effects on the environment, including the quantity and quality of water, and in consequence on people. This may lead both to local contestation and to institutional change in the water and environment sectors as reflected by political ecology and new institutionalism. For instance, next to legal instruments, water managers have called for River Basin Organisations (RBOs) as platforms to engage multiple stakeholders and to manage water resources competing claims and conflicts. This raises the question whether RBOs are indeed neutral fora for mediating competing claims under the strong influence of powerful actors such as mining companies. Drawing on secondary data and regular interviews with actors in Mongolia’s water sector since 2009, this paper discusses this question by analysing the co-evolution of mining activities and water politics, and in particular RBOs, in Mongolia during the last decade.

The paper shows that massive investments in extractive resources and consequently economic growth in Mongolia, as well as other global drivers such as climate change, are already and will impact water resources drastically. Furthermore, it illustrates how the impact of such investments promoted several reform processes in Mongolia’s water sector, including major legal reforms in 2004, 2009 and 2012 as well as the setup of River Basin Councils (RBCs) since 2009 and River Basin Administrations (RBAs) since 2013. Moreover, the Ministry of Environment was declared one of four strategic ministries in 2012 but lost this position again in 2014. At national level water administrators find themselves in a difficult position between promoting the country’s economic growth through water diversions for mining and protecting the resource. At the basin level, the establishment of RBAs can be considered a major step forward, but still RBAs lack resources and partly mandates to balance competing claims and to perform monitoring and enforcement tasks. RBCs as multi-stakeholder fora are inactive due to lack of
resources. Local protests against water depletion and pollution through mining partly take militant forms but remain single events. Water tariff and further environmental reforms in parliament stall due to resistance by powerful actors. Overall, both local resistance and RBOs so far remain weak, and Mongolian water sector remains the arena where contested imaginations about the country’s future development pathways become evident.

**What property regime(s) for a sustainable management of fresh water resources? An analysis of the property regimes in international fresh water law and their implications on national public policies**

Charlotte de Callatay (University of Louvain)

Fresh water is a boiling issue, notably when it comes to identify the most appropriate property regime to guarantee a sustainable management of the resource (De Schutter and Pistor 2015). Public property, private property and common property are often presented as three monolithic, mutually exclusive options. However, hybridisation is a possibility, increasingly witnessed by experiences in the field. The assessment of each policy option in terms of economic efficiency, equity, and sustainability is complex.

In this context, this purpose of the presentation is threefold. First, it explores the concept of property in fresh water international law. It shows the tensions between international public law, international environmental law, international economic law and international law of the protection of human rights (Boisson de Chazournes 2013, Cuq 2013). Second, five broader governance models are distinguished: the state-administrative, the market-oriented, the community-based, the integrated and the common models. Each governance model promotes one kind of property regime. In international law, in the literature and among the international actors, traces of those five paradigms are found and testify the hybridisation mentioned above. Third, we point out the consequences of those different models on national property regimes and national public policies related to the allocation of water resources. Interaction between local and global institutions will be emphasize (Palh-Wostl and al. 2010, Ostrom and Janssen 2002). This talk fits into an interdisciplinary PhD research in law and economic sciences. The first aim is to better understand the conditions under which each property regime is able to guarantee a sustainable management of fresh water resources. The second goal is to analyse under which measures national and international property regimes interact smoothly. The choice of a property regime is first and foremost a political one. Therefore, this research focuses also on governance model and on the conditions for allowing a water participatory democracy to emerge.

**Implications of post-2015 sustainable development goals for governing the commons: a case of rainwater harvesting system in India**

Anushree Singh (Jawaharlal Nehru University, New Delhi)

The sustainable developmental agenda, 2015 presented an unparalleled opportunity to bring the countries and citizens of the world together to decide and get on towards new paths to improve the lives of people everywhere. These decisions will determine the global course of action to end poverty, promote prosperity and well-being for all, protect the environment and address climate change. These sustainable development goals will build upon the eight Millennium Development Goals. Seventeen goals have been proposed to determine the global course of action to end poverty, promote prosperity and wellbeing for all, protect the environment and address climate change. Goal two of the seventeen goals is about ending
hunger, enhancing food and nutrition security, and promoting sustainable agriculture. Goal six of the seventeen goals is about ensuring the availability and sustainable management of water and sanitation for all. Sustainable agriculture and enhancing food security and ensuring sustainable management of water go hand in hand especially for developing countries like India where agriculture is the mainstay of the economy. In deed sustainable management of water would help in combating conditions like drought too. Management of water becomes very important in arid and semi-arid areas of India where rainfall is erratic and scanty. For successful management of water, a shift away from centralised management of water to decentralised community based practice of water management has been articulated. For a country like India, this means a revival of water harvesting practices which got disrupted during the last two centuries.

This paper, will discuss how the various institutional and technological interventions initiated during British India and continued in the post-independence period, led to decay of knowledge of these water harvesting systems existing in the commons. It explains the decay of traditional rain-water harvesting systems in India during the colonial period in terms of incompatibility of the local knowledge systems embedded in traditional rainwater harvesting systems with the 'modern scientific knowledge' that informed the British engineering. The two knowledge systems underlying them were different and little attempts were made to reconcile their apparent incompatibility. The decay of these practices made it difficult for the revival of water harvesting practices in the commons although there have been attempts by Non-Government Organizations (NGOs) in India to revive such practices. We discuss a case of revival of water harvesting system in semi-arid region of India and decay of water harvesting system in arid region of India. The revival attempts by NGOs along with the communities at local levels would help in sustainable management of water and combating drought and sustainable agricultural practices for enhancing food security. These initiatives will help in economic growth of the developing countries and hence reduce poverty especially where agriculture is the mainstay of the economy.
The socio-ecological values of commons for sustainable development are increasingly recognized by research and policy. However, when critically reviewing to what degree the basic values and principles underlying the manifold expressions of commons are linking to fundamental values of sustainability it turns out that the main linkages refer to the environmental dimension of sustainability. To what degree social, political and cultural aspects of commons relate to sustainability and what could be learnt from the more comprehensive definition of sustainability – in terms of environmental justice – is at the centre of this panel.

Environmental justice is defined in a broad sense as the integration of various elements stemming from theories of social sciences and humanities and the concepts on the same matter emerging from social and environmental movements (Schlosberg, 2007). Consequently, environmental justice aims linking distributive (social) justice with related differentiated affectation of distinct social groups by positive and negative environmental externalities, and the question on how human societies can respect the rights of non-human communities of the biosphere (ecological justice). Environmental justice is given if the equal distribution of social and ecological goods and services are recognized and allow expressing the capabilities and legitimate participation of local people in adequate ways, recognizing that this needs to be balanced with the requirements deriving from ecological justices.

Paper Contributors:

**A definition of the commons, between human rights, tradition and resilience**

Elisabetta Cangelosi (SciencePo, Paris)

During the last twenty years, the commons have evolved, while the world itself was rapidly changing. From a purely traditional and customary form of managing natural resources, the commons now represent a key topic for the debate on economic, social and environmental justice. The debate about the commons plays a relevant role at global level, connecting experiences of resilience around the world.

However, the definition of the commons tends to remain open and it varies depending on the discipline involved: from a juridical, economic, social and economic perspective, the commons can include different experiences.

This paper does not aim at finding a conclusive definition of the commons, but at focusing on it from an approach that combines human rights, tradition and resilience. The paper is based on the combination of theoretical considerations and an analysis the data collected by the organisation Remix the Commons as part of the Define The Commons project, which is “a multilingual project sharing definitions of commons [...] over several years and in different places around the world” http://www.remixthecommons.org/en/projet/definir-les-biens-communs/). In particular the analysis takes into account the connection between the commons
and the enjoyment of human rights (as presented in one of the few legal text providing a legal definition of the commons - Commissione Rodotà, Disegno di Legge Delega 2007) and of the commons as tools of resilience, embedded in local cultures and contexts. The paper aims at showing existing commonalities as well as substantial differences at global level, from a local perspective, in order to develop prospects which take into account the diverse nature of the commons and their role for social and economic change in a “glocal” world.

Confronting cultural frontiers and environmental justice in the Yungas Biosphere Reserve, Argentina
Marc L.R. Hufty (Graduate Institute, University of Geneva)

The Yungas Biosphere Reserve, Northwest Argentina, was created in 2002, with a large support from ecologists, non-governmental organizations, provincial and national governments. After an optimist start, it entered into a period of trouble and since 2007, it runs idle in a situation of political stalemate. As a mechanism with the potential to conciliate conservation with development, the establishment of a biosphere reserve could have helped resolve some of the tensions in the region through co-management and inclusive participation. Instead, it became an epitome of the historical confrontation between indigenous peoples and the dominant Argentine society, generating frustration and disappointment on both sides. Our ambition is to expose the sequence of events leading to this situation. We try to provide a plausible explanation based on a political ecology analysis. To understand how it happened, history and the social context are crucial factors. Kolla communities, as well as other indigenous groups in Argentina, have traditionally been marginalized, politically, economically and ecologically, and victims of an ethnocide in which they were converted into Spanish-speaking peasants. Slowly, through political struggles since the mid-twentieth century they have regained their identity as indigenous and land ownership, both being closely related. Still, many problems linked to colonial and post-colonial dispossession are still pending and indigenous lands are under assault from the agro industrial and mining sectors (Ayana 2012). In this highly sensitive context, the establishment of the Biosphere Reserve was a challenge.
The Kollas were not a priori against its creation, but as it went on, they felt marginalized by the emerging governance process and the Reserve became a symbol of the way they had been treated by the local elites for centuries. They began to perceive that their recovered identity and pain – fully gained land ownership were threatened by a conservation scheme conceived in a top-down fashion without adequate local participation. By rejecting the Reserve, they challenged their marginalization and the traditional social order. This case teaches crucial lessons for the debate on participatory conservation and for the Man and Biosphere Program itself. It brings forth questions of equity and environmental justice in the establishment of protected areas and signals the renewed strength of the indigenous peoples in Argentina and the henceforth necessity to build a more con-sensual political system, in contrast to the previously prevalent power politics.

After presenting the evolution and characteristics of the biosphere reserves, we expose the history of indigenous peoples in Argentina’s Northwest, describe the creation of the Yungas Biosphere Reserve, and analyse the situation that led to the actual standstill. The data presented here are the result of an ongoing research started in 2006.
Ethical Reflections on Commons
Thomas Kesselring (Institute of Philosophy, University of Bern)

“Everyone has the right to own property alone as well as in association with others.” (Universal Declaration of Human Rights, Art. 17). The distinction between “property alone” and “property in association with others” (= “Commons”) has an exact parallel in Ethics - in the guise of the distinction between respect for an individual and compliance with a group. An old rule referring to the respect for an individual is the “Golden Rule” (“Don’t do to others what you don’t want others do to you.”). The compliance with the group to which one belongs is expressed in a rule which is historically much younger - the “generalization rule”. As there is a difference between “common goods” and “global common goods”, there is, in Ethics, a difference between the “generalization rule” (relative to a limited group) and the “universalization rule” (related to all human beings; cf. the first part of Kant’s “Categorical Imperative”). Long before a child or adolescent learns these rules, one by one, he is able to empathize with another person (= to put himself within that person) and/or to identify himself with the group (= to feel as a part of the group) which he belongs to. So, the difference between respect for another person and compliance with his own group has its’ image in our emotional state. – It’s worthwhile to elaborate a bit the ethical foundations of our convictions concerning property!

Countering the Transformation of Collective Land into Private Oil Palm Estates: Environmental Justice and Local Resistance on Palawan Island (the Philippines)
Dario Novellino (Centre for Biocultural Diversity, University of Kent)

Agro-fuels in Palawan (the ‘Philippine’s last ecological frontier’) have been portrayed as a key solution to lower greenhouse gas emissions; achieve energy independence, food-security, as well as a tool for poverty eradication (Dalabajan 2015). However, industrial cultivation of oil palms in Palawan, and nationwide, is driven – instead - by growing global consumption of palm oil, with the European Union playing an important role. Overall massive demand for palm oil it is geared towards quick profits leading to social marginalization and environmental destruction (c.f. Barraquias 2010, Larsen et al. 2014, Neame & Villarante 2013). This presentation discusses how massive con-version of land into oil palm plantations is endangering biodiversity, water resources, the quality of topsoil and the livelihood of indigenous peoples and Commons, while undermining Palawan local food sovereignty and exacerbating rural poverty. On the other hand, it analyses attempts by local community to have access to environmental justice by appealing to existing environmental and indigenous people’s rights laws. The recent submission of a petition signed by more than 4,200 farmers and indigenous people requesting the provincial government to pass a moratorium on oil palm expansion, is an instance of this. While focusing on the most explicit consequences of oil palm development on both the environment and traditional livelihoods, I intend to examine cur-rent legal options being resorted to by oil palm impacted communities. In addition to this, I wish to determine how and to what extend oil palm companies have been able to violate existing environmental laws and regulations, which, instead, should have ensured the sustainable development and environmental protection of Commons’ and indigenous lands and territories. On a parallel front, I further suggest that people’s access to ‘environmental justice’, in spite of the innovative and progressive legal framework, is hindered by a cumbersome, ‘slow’ and often ‘corruptible’ judicial system. The article suggests that oil palm development is already competing and taking over cropland and coconut groves, which are sustaining local self-sufficiency. On the other hand, the Government is appealing to notions such as ‘idle’ and
'underdeveloped' lands to bypass its own environmental and pro-indigenous peoples’ legislation. The general take of this paper is that peoples’ disenchantment with State laws and the inability of having access to ‘environmental jus-tice’ is resulting in a multiplicity of opportunistic responses, open-ended processes and coping strategies aiming at ensuring everyday survival more that the adhesion to a coherent advocacy agenda. As a result, such responses are not always coherent with the concept of sustainable development, and might even counter it.

Data on which this paper is based has been collected by the author between 2010 and 2014 and have been primarily obtained through various ethnographic methods: participatory observation, audio-visual documentation, participatory GIS practices, open-ended interviews and in-depth appraisals in six municipalities of Southern Palawan.
Panel Convenor:

Iain MacKinnon (Coventry University)

This panel will discuss the influence that legislation in Europe (both national legislation and Europe-wide legislation) for the conservation of nature has on the management of common pool resource systems on land and at sea. Papers would be welcome both on instances of challenges that conservation legislation and designations create for the management of commons, and also on efforts to resolve these challenges through innovative ways of creating or strengthening community governance systems that fit with or contest conservation aims. Papers which seek to give more overarching accounts of the architecture and origins of conservation legislation in Europe, and how its principles and requirements relate to the management of commons, would also be welcome. It is anticipated that the papers will be followed by a discussion on: the main challenges to commons governance that have emerged from the session; the drivers that create these challenges; and the potential for successful solutions to be found.

Paper Contributors:

**Defining a Research Agenda for the Commons in Spain**
Maria Del Mar Delgado-Serrano

The commons are under considerable pressure worldwide, as they were/are mostly seen as archaic, ineffective and even destructive by the actual economic models. For these reasons they were largely privatized over the previous centuries. More recently, they are suffering from land grabbing, pressures on the traditional use of natural resources and threats to ancestral management systems.

In Spain, the commons were regarded as spaces without rules and the local management system was seen as inefficient and irrelevant because of their high diversity and diverse approaches. Private property has always been backed by the legal system, but commons situation is rather different (common property is not recognized by the Spanish Constitution, as it does the Portuguese one). This led to an intense privatization of these commons during the 19th and 20th centuries (more than 4 million hectares in Castilla La Mancha, Extremadura, Andalucía, Murcia, Aragón and Navarra). The trend was reverted in 1968 with the approval of Law 52/1968 of 27th July on Common Mountains and Hills (Lana, 2014) that guaranteed the status of the commons and the rights of the communities managing them.

However, the Spanish commons are currently under increasing pressures by a new legal framework, Law 27/2013, of 27th December for the rationalization and sustainability of Local Administrations that could lead to the disappearance of most commons. As a reaction to this obligation, the civil society has lively reacted and a strong movement for the defence of the commons currently exists, being Iniciativa Comunales a CSO that hosts an increasing number of commons-related associations.

Maintaining and restoring commons and its governance systems might be essential for social and ecological sustainability in Europe, but quite often commons and commoners lack
scientific knowledge and evidence based research that supports their relevance and their role in tackling current societal challenges. To face this situation, members of more than 30 commons CSOs met with researchers of the Universidad of Cordoba and using participatory techniques, they define the main priorities that should be included in a research agenda of the commons in Spain. The objective was to create an interface between science and society, where scientists support society by targeting their research and providing support to traditional knowledge, and CSOs backed re-searchers providing information and demanding tools and results adapted to their needs.

In this context, the main problems faced by the commons were analysed and the most pressing research needs and knowledge gaps of this type of management systems and of the role they play and can play in sustainable management identified. This paper presents the main results and the research priorities identified around the following 4 topics: 1) Commons standards to understand the commons (definition, legal frameworks, governance systems); 2) contributions of the commons to societal challenges; 3) increasing the visibility of commons and 4) challenges for the governance and management of the commons.

Governance of the Commons: Using the Regional Nature Parks in Switzerland as an Example
Yasmine Annina Willi (Swiss Federal Research Institute)
Marco Pütz (Swiss Federal Research Institute)

In 2007, the Swiss federal government revised the Federal Act of the Protection of Nature and Cultural Heritage (NCHA), and started to promote the new policy of Regional Nature Parks (Regionale Naturpärke). The policy aims at conserving and enhancing the beauty of nature and land-scape by aligning environmental protection and rural economic development goals. Its main objective is to support the sustainable development of rural regions coping with ecological and socioeconomic challenges. Regional Nature Parks should help stimulate regional economy while at the same time protect nature resources by strengthening sustainable production processes, marketing of local goods and by promoting eco-tourism and environmental education.

This new approach in regional development – brought forth by the revision of the NCHA – appears to be inseparably interwoven with regional governance, as it is characterized by typical governance attributes such as the blurring of boundaries between and within the private and public sector, the increased participation of non-state actors in public decisions, and weak institutions. However, both the meaning of the term regional governance and the understanding of regional governance as a concept to analyse governance processes in regional development remain unclear. Particularly, its characteristics and their interactions are only poorly understood. But in order to understand the impact of the revised NCHA and its main principles and requirements on the management of the commons, we find it necessary to first understand the governance characteristics and functioning of the new regional development approach.

Starting from that assumption the paper first aims at contributing to the understanding of regional governance by investigating its different meanings and usages as a term and concept by addressing experts from science and practice in a Delphi survey. Second, based on the Delphi survey’s findings, the paper proposes a conceptual framework to empirically analyse various forms of regional governance. Starting from a concise definition our proposed governance framework com-prises five characteristic dimensions: (i) participation, (ii) liability, (iii) formalization, (iv) regional autonomy and (v) power relations. Each of these dimensions can
be disaggregated into a set of 28 indicators in total. The Delphi-survey included 52 experts from both academia and practice of regional development from Switzerland and Germany. The results of the Delphi survey show that practitioners regard regional governance as a concept or maybe even as a tool to improve regional cooperation. In contrast to this normative understanding of regional governance academia considers regional governance as a research perspective to look at regional transformations, not necessarily only limited to regional economic development. Further, broader understandings of governance include all forms of coordination between hierarchy and market. Narrower understandings focus on the multiplicity of stakeholders and especially the growing importance of non-state actors for regional development.

**European cultural landscapes as complex social-ecological systems: Pathways, pitfalls, and perspectives**

Christian Schleyer (Institute of Social Ecology, University Klagenfurt)
Harald Schaich (Environmental Protection Agency, Freiburg)
Claudia Bieling (Institute of Social Sciences in Agriculture, University of Hohenheim)
Holger Gerdes (Ecologic Institute, Berlin)
Bettina Ohnesorge (International Academy for Nature Conservation)
Tobias Plieninger (Department of Geosciences and Natural Resource Management, University of Copenhagen)
Kathrin Trommler (Geography Department, Humboldt-Universität zu Berlin)
Franziska Wolff (Öko-Institut e.V)

Throughout Europe, ingenious land-use practices have generated biodiversity- and ecosystem-services-rich cultural landscapes. However, these are under pressure from agricultural intensification, land abandonment, and urbanization. Cultural landscapes can be conceptualized as complex social-ecological systems often showing features of public goods where exclusion of actors is difficult and some form of collective action and coordination between resource users within a particular landscape is necessary to ensure the protection or provision of appropriate levels of biodiversity and ecosystem services. The cultural landscapes concept has recently been broadly adopted in conservation science, policy, and management to address these challenges. The interest in both outstanding and vernacular landscapes finds expression in the UNESCO World Heritage Convention, the European Landscape Convention, and the IUCN Protected Landscape Approach. These policies typically promote the protection, management, planning, and governance of cultural landscapes. However, land use decisions affecting the provision of ecosystem services in landscapes are influenced by a multitude of regulatory and incentive-based policies implemented at different political and administrative levels (local, national, EU, global). Here, the ecosystem services approach can be a powerful framework to guide conservation efforts, but has been rarely conceptualized, tested, and applied in landscape-level conservation and management.

This contribution aims at enhancing the knowledge of how to safeguard ecosystem services in complex social-ecological systems such as cultural landscapes. Assuming a European perspective, it analyses the relations between ecosystem services, policy instruments, and local quality of life in cultural landscapes. The contribution sheds light on various peculiarities that need to be considered when implementing an ecosystem services approach in anthropogenic landscapes. In particular, it highlights the importance of (a) spatial dimensions of biodiversity and ecosystem services, (b) policy instruments and ownership structures, (c) the perspectives, knowledge, and action of local people and land-users, (d) the multiplicity of ecosystem services,
including cultural ecosystem services, and (e) a dynamic view on landscapes. Further, the linkages between the landscape approach and the debate around complex social-ecological systems are explored and discussed.
The Blue Communities Project is a joint initiative of the Council of Canadians and the Canadian Union of Public Employees. It was created to help community activists and local leaders protect the water commons – our shared water resources and services. In 2011, the City of Burnaby in British Columbia became Canada’s first Blue Community; since then, others have followed. In 2013, the City and the University of Bern became the first Blue Communities outside of Canada. Paris followed suit in March 2016. Blue Communities commit themselves to principles that help them respect the rights to water and sanitation in line with their specific context and duties, and to supporting the ability of other communities to do so. These principles concern local governance, on the one hand, and participation in shaping the higher national and international levels that frame local governance, on the other.

This panel on the Blue Communities initiative will address the local level of governance and how it interacts with the national level. We will focus on experiences of collective action by Blue Communities in Canada and Switzerland, including the University of Bern, and explore the potential for scaling up the collective action and increasing impact. In the case of the University of Bern, we will also discuss the meaning of sustainability principles in tertiary education and research and how they contribute to sustainable development.

Indeed, the Blue Communities initiative’s potential for impact is strongly determined by education, as well as by the degree to which the national and international institutional setting supports the emergence of Common Pool Resource (CPR) institutions.

**Paper Contributors:**

Information on paper contributions available upon request to the convenor
# C33 – Is the Right to Water and Sanitation Supported or Undermined by the New Mega Trade Agreements TTIP, TTP, TISA, and CETA?
Wednesday 11 May 2016, 16.30-18.30, Main Building, Room 028

Panel Convenors:

Elisabeth Bürgi Bonanomi (World Trade Institute, Centre for Development and Environment and Faculty of Law, University of Bern)
Andreas Kläy (Centre for Development and Environment, University of Bern)

The Blue Communities Project is a Canadian initiative with offshoots in various other countries, including Switzerland (see also Panel 32). The project is based on the right to water and sanitation and was created to protect public access to water as a common-pool resource. In recent years, there has been a growing debate on whether new mega trade agreements like the TTIP, the TTP, the CETA, or the TISA – which are under negotiation or close to being implemented – will support or undermine the right to water and related common-property regimes. This panel will explore to which extent mega trade agreements might impact on water governance and on initiatives such as the Blue Communities Project.

Paper Contributors:

A Right to Water perspective on CETA, TTIP and TISA
Maude Barlow (The Council of Canadians)

Modern trade and investment agreements are not so much about taking down tariff barriers anymore but about removing “non-tariff barriers”. Maude Barlow sees domestic human rights, labour and environmental protections at risk, for the benefit of corporate profit. Canada has lived with the North American Free Trade Agreement for over 20 years and has seen many water protection laws successfully challenged by American investors. Based on this experience, Maude Barlow will point towards similar corporate rights contained in CETA, TTIP and TISA – the newest agreement on services - and will illustrate how people all over the world are fighting back to protect their water “commons” and the human right to water from these “dangerous new rules”, as she calls them.

Investment regulation in mega regionals: promoting or undermining the right to water?
Rodrigo Polanco (World Trade Institute, University of Bern)

Rodrigo Polanco’s presentation will delve into the following questions: (i) How may rules regarding investment protection as established in investment chapters of mega-regionals affect the right to water? (ii) Can foreign investors claim that legitimate expectations have been affected if a Member State regulates the use of water based on public-policy objectives, including by implementing specific human rights obligations? (iii) Can the human right to water be used as a defence in investment treaty arbitration by the respondent State?
Will TISA undermine the right to water and the right to food?
Michael Nanz (FIAN, Switzerland)

Michael Nanz will analyse whether and how the TISA – the newest agreement on trade in services which is currently negotiated – may impact on the human right to water and sanitation, a resource being crucial for both consumers and agricultural producers, including pastoralists. In addition, the assumed impacts of TISA on the human right to adequate food and nutrition will be discussed. Not only the outcomes of TISA will be critical for commons and human rights, but already the negotiation process violates human rights and democratic principles. This leads to the more general question of whether the TISA contributes to dismantling the power of States and to “corporate capture” public domains.

A case study: Water governance in Kenya and how it relates to international economic regimes? Some first insights
Christiane Fürst (World Trade Institute, University of Bern)

Christiane Fürst will present an ongoing study on the international economic regulation of water governance in Kenya which she is conducting as part of her PhD. She is currently investigating to which extent the international economic law framework has or might impact on agricultural water supply in Kenya. Improving water supply systems is an important part of the Kenyan strategy to improve food security. Christiane Fürst presents some preliminary findings and explains how she has to proceed in order to explore whether and how (multilateral or regional) trade agreements and international investment law enhance or undermine the capacity of the State to provide reliable water supply services for food production.
#C35 – "Local knowledge" in climate politics: negotiating climate responsibility
Wednesday 11 May 2016, 08.30-10.30, Main Building, Room 028

Convenors:

Julia Eckert (Institute of Social Anthropology, University of Bern)

In its latest assessment report of 2014, the International Panel on Climate Change (IPCC) emphasized the necessity of recognizing indigenous, local and traditional knowledge systems and practices as a major resource in the struggle to adapt to climate change and weather-related risks. Current research efforts, however, show a tendency to study either; vulnerable groups and local knowledge systems in regard to adaptation and resilience, on the one hand, or national and international regimes of climate policy, on the other. When these interrelated fields are examined in isolation from each other, important questions that address the mutual impact of local knowledge and global politics cannot be answered. If local knowledge is identified as a major resource, it is of crucial interest to study how it is formed, institutionalized and brought onto the international agenda.

For a deeper understanding of the processes and chains of translation (Merry 2006; Rottenburg 2009), the panel will focus on how local communities in Latin America, sub-Saharan Africa, India and, as a contrasting view, municipal networks perceive and adapt to new and increasing climate variability and how they cope with the implementation of national and international climate policies. We will enquire into the influences that local worldviews about the relationship between humans and nature have in shaping national climate policies. We will focus on how notions of climate responsibility arising from different contexts are negotiated, contested and translated within policy forums, and how local knowledge is classified, selected and interpreted in policy institutions.

Paper Contributors:

**Indigenous Knowledge as Local Response to Globalization and Climate Change in Nigeria/Africa**
Geoffrey I. Nwaka (Abia State University Humanities and Social Sciences, Uturu)

As we now adopt the new Sustainable Development Goals in Africa, indigenous knowledge may prove to be “the single largest knowledge resource not yet mobilized in the development enterprise”. Africa contributes least to, but suffers the most from the disastrous consequences of climate change. While the industrialized and more affluent countries are rightly being called upon to take greater responsibility for the current global environmental and economic crises, Marshall Sahlins has emphasized the need for all peoples “to indigenize the forces of global modernity, and turn them to their own ends”, as the real impact of globalization depends largely on the responses developed at the local level. How can Africa engage with globalization,

1 We recognize that there are important distinctions between ‘indigenous’, ‘local’, and ‘traditional’ knowledge systems and we are aware of the critical debates on these terminologies. Nevertheless, for the sake of simplicity, we use the term ‘local’ as an umbrella term to refer to all of these different knowledge systems. We concede that the spatialisation implied in the term ‘local’ carries its own limitations since all knowledge is local to some degree, and trans-local in other aspects. We therefore use a pragmatic notion of local knowledge, which appears as useful as the panel is interested in the internationalisation of formerly locally restricted notions and concepts.
and cope with the worsening threats of flooding, droughts and other emergencies that result from extreme weather conditions? For a long time African customs and traditions were misperceived as irrational and incompatible with the conventional strategies of development. But the current global economic and ecological crises have exposed flaws in the Western neoliberal model of development which is largely to blame for these problems, and for widening inequalities within and between nations. This paper considers how indigenous knowledge and practice can be used to support good governance, agriculture and natural resource management, poverty alleviation, and the mitigation and adaptation to climate change. Although poverty may sometimes force people to use resources unsustainably, most traditional African societies have deeply entrenched ideas about environmental protection and sustainability because their livelihood depends largely on the land and on the stability of the ecosystem. They believe that land and other forms of nature are sacred, and are held in trust by the present day users on behalf of dead ancestors and future generations. While Africa needs to draw from global science and international best practices, indigenous knowledge offers a model for rethinking and redirecting the development process, and for enlisting positive traditional values and institutions in a way that enables and empowers local actors to take part in their own development. Development agents, researchers and donors, who often assume a knowledge or capacity vacuum in Africa, should instead try to tap into indigenous knowledge for locally appropriate ways of forecasting weather systems, traditional techniques of soil management, pest and disease control, adopting suitable crop and animal varieties, and so on. By building on the indigenous we can make development more participatory and sustainable, and also promote intercultural dialogue in African development.

The ethics of commonality in climate responsibility debates. Local roots, national contexts and global connections of the concept of buen vivir (“good life”) in Ecuador

Christian Büschges (Institute of History, University of Bern)

Since the year 2000 the concept of buen vivir has entered debates on climate responsibility in Ecuador, the Andean Region (particularly Bolivia) and on an international scale. Put in simple terms, buen vivir advocates for a holistic and harmonious relationship between mankind and nature. While the concept is normally considered to have originated in indigenous world views or cosmovisions, stemming from the quichua term sumak kawsay, its main representatives in current public debates come from very different social and professional backgrounds, including indigenous movements, environmental or development agencies, as well as (left-wing) academics and politicians. For this very reason, the discourse of buen vivir appears in a variety of political agendas such as sustainable development or inter-culturality. In the context of current national and global debates on climate responsibility, the buen vivir concept is used to criticize capitalist, especially extractivist modes of production and western technological discourses dealing with the effects of climate change. Buen vivir is then presented as an alternative world view and societal model that not only defends indigenous communities and their communal forms of access to and management of (natural) resources but serves as a model of rethinking the relationship between mankind and nature on a national and global scale.

The paper addresses, first, mayor issues of the national and transnational political debates on climate responsibility related to the concept of buen vivir in Ecuador, with special regard to the changing spectrum and entanglement of different actors and arguments that can be found in these public debates since its beginnings around the year 2000. Second, the paper takes a
look at the local conceptions and usages of sumak kawsay in indigenous communities of the northern Ecuadorian highlands. A central argument of the paper is that the considerable impact of the concept of buen vivir/sumac kawsay on national and transnational debates on climate responsibility is due to its successful entanglement with other, traditional and new environmental or (left-wing) political discourses. In addition, this “conceptual hybridity” is reflected in the flexible everyday usages and practices of the concept of sumak kawsay by local indigenous communities of the Northern Ecuadorian highlands.

Climate change and the crisis of reciprocal relations among the Q’eros of the Peruvian Andes
Geremia Cometti (Collège de France, Laboratoire d’Anthropologie Sociale)

The Q’eros are an indigenous group living on the oriental slope of the Cordillera Vilcanota, in the department of Cuzco. They are split into five transhumant communities spanning three ecological levels. Climatic changes, especially through changes in rainfall patterns, have a significant impact on the agricultural productions of the Q’eros and they endanger the health and existence of their livestock.
The majority of Q’eros explain these meteorological and climatic changes through a degradation of the reciprocal relations between themselves and non-human entities, in particular their divinities, the Pachamama (Mother Earth) and the Apu (the mountain spirits). This interpretation tends to evoke sentiments of guilt in the Q’eros, particularly in the context of their commercialization of their ceremonies for the inhabitants of Cuzco and tourists. By abandoning these ritual practices, or by undertaking them with less rigour and participation, they deem to have broken the reciprocal relations they usually maintained with their divinities. As a result of their abatement, rain falls ever more profusely during the rainy season yet, by contrast, does not fall sufficiently during the dry season. In turn, cultivating crops and breeding animals have become ever more difficult.
Through ethnographic research, this paper proposes a reconceptualization of the relationship between humans and non-human entities in order to better understand how Andean societies in general, and the Q’eros in particular, conceive of and react to the rapid and drastic modifications of their environments. The crux of this research is to underline the importance and necessity of establishing a dialogue between the scientific discourse on climate change, modern institutions (the national and regional states, Non-Governmental Organisations (NGOs), etc.), and those societies directly concerned by issues related to environmental degradation. The study thus intends to ex-pose the conventional analysis to an approach that goes beyond Western ontology and epistemology.

Mitigation and Adaptation of Climate Change by Tribes of Thar Desert in India
Neelam Kadyan (World Academy of Science, Engineering and Technology)
Sunil Asopa (Faculty of Law, JNV University of Jodhpur)

Traditional tribal knowledge is an important tool for the scientific basis of natural disaster management and conservation of environment. For generations, tribal communities in the Indian Thar desert have managed and adapted to the climate change impacts by their ability to perceive natural disaster and extreme weather events. In ancient Indian texts, tribal people are referred to as ‘vanjatis’ or ‘adivasis’ who live in forests, deserts and remote areas, and in spite of zero contribution to the climate change, these people are most adversely affected by it due to their heavy economic and cultural dependence on natural resources. Tribal people of
the Thar desert of Rajasthan have excellent knowledge of land, desert, sky and changes related to weather and climate, and their traditional indigenous knowledge is helpful in the detection of environmental changes, the implementation and development of strategies for climate change adaption and sustainable development. The tribes of Thar have vast knowledge regarding wind direction, cloud formation, lightning, rain forecast, extent of rainfall, future effects of draughts etc. But now the tribal people of Rajasthan are facing serious climate change effects which include poverty, famine, draughts and floods, and in spite of great hardship they have developed through their traditional knowledge a variety of measures to cope with it, such as early-maturing crop varieties, gathering a diversity of wild fruits and vegetables, wetlands cultivation, livestock diversifying and splitting etc. Traditional technologies of building houses, land use and agricultural practices can be adopted for disaster risk measures.

This research is a case study of traditional knowledge of tribes mainly including the tribes of Bhil, Meena, Gadiya Lohars, Garasia, Sahariyas, Damors, Meo and Banjara, Kathod, Rabaris, Sansi, Kanjar and specifically explains the relationship of traditional tribal knowledge and climate change. It also explains the challenges and benefits which are associated with tribal knowledge and highlights how tribal knowledge can help in research, education, climate change policies, assessments, adaptation and migration at national, regional and local levels.
Pastoral land rights in Central Eurasia have traditionally been held as communal property, either by kin groups, aristocratic fiefdoms or, later, socialist administrative units. In the course of the 20th century various forms of state intervention have changed this picture, although in practice most land was still utilized in ways that did not allow exclusive access to individual pastures. Even though sedentarisation was much propagated by socialist modernisers, the impacts were not as severe and often only temporary.

The situation took a new turn in recent years when state efforts towards the creation of stable user groups or fenced property started to interfere, or threatened to, more profoundly with the traditional system. Apart from the image of nomads as being backward this was further fuelled by the accusations that common property regimes are responsible for land degradation and consequent hazards. Following the “Tragedy of the Commons”-paradigm state officials as well as international advisors and European donor agencies stressed the need for clearly defined property rights and rules of access.

So far, the implementation of these ideas varies across the region. While the Chinese government has resumed its active policy towards sedentarisation, in Mongolia the new land law is still very much a written document with little meaning beyond the respective ministry. The former Soviet republics, including Kazakhstan, Kyrgyzstan and the Russian Federation, on the other hand, are just regaining former livestock numbers and have little issue with pasture depletion anyway.

In this panel we will look comparatively at differences in policies of dissolving the commons in Central Eurasia and the way pastoralists respond to this. Actors involved in this include besides local and national governments also increasingly international and semi-governmental organisations such as the Swiss SDC or the German GIZ pushing for universal and standardised property rights and livestock management regimes. But resistance towards sedentarisation and more exclusive land rights is by no means universal. People may either stand up against, ignore or actively utilise new property regimes for their own (assumed) benefit. In other cases, effective resistance is hampered by a lack of collective action among herders. What we aim to look at is then the respective interests actors have, the institutional frameworks within which they operate and the relative bargaining power of different groups of actors.

Paper Contributors:

Pastoral land rights in Western Mongolia: state laws and local practices
Peter Finke (Department of Social Anthropology and Cultural Studies, University of Zürich)

Pastoralism is the dominant livelihood in most of western Mongolia and traditionally based on collective access rights to land. This has recently been challenged by national laws, inspired by modernist and conversationalist ideas of international NGOs that aim at implementing clearly
defined user groups with exclusive rights and corresponding obligations. In particular, a
campaign called "green gold" – funded by international donors and development agencies –
has set out to pre-serve natural resources and simultaneously support grass-root organisations
for trade.
Herders themselves, however, remain rather sceptical and have so far ignored all attempts for
more control and restrictions regarding pastoral land use. They do so also because annual
grazing cycles are very complex and form overlapping and frequently changing patterns, which
do not allow stable neighbourhoods or other types of user communities. At the same time,
many com-plain about an increase in trespassing and seasonal misuses of pastures,
threatening a sustainable economic situation.
This paper will analyse the situation and also explain the reason for a lack of collective action
on the part of the households concerned. Rapid changes in the economic and political system
as well as on-going social stratification, so the argument, thereby hamper mutual trust and
cooperation. At the same time, the withdrawal of the state in practical matters and a complex
inter-ethnic situation have changed the relative bargaining power of different actors to pursue
their respective interests, often to the detriment of sustainable arrangements.

Decentralizing Governance of Agropastoral Systems in Kyrgyzstan: An Assessment of
Recent Pasture Reforms
Aiganysh Isaeva (Mountain Societies Research Institute, University of Central Asia)

Agropastoral systems in Kyrgyzstan have undergone dramatic change in recent decades. In
large part, change has resulted from the introduction of legislation that devolves authority and
responsibility for the management of common-pool agropastoral resources to community-
level pasture users associations. By applying Ostrom’s principles of common resource
governance, this paper analyses the institutions and norms that currently shape local
management practices in rural areas of Naryn Province in Kyrgyzstan and the views of different
actors on pasture governance, including points of disagreement. Our research and analysis
reveal that the community-initiated and -owned systems of pasture governance that were
expected to develop and mature under the new Pasture Law have not yet been entirely realized.
Decentralization occurred without the participation or awareness of most local resource users.
As a consequence, users are creating and reinforcing their own community-defined practices
and internal rules, leaving official management plans largely ignored and unenforced. Resource
users tend to perceive the government-sanctioned pasture users associations not as public or
democratic organizations that represent their interests, but rather as agencies that aim
primarily to control the use of resources, to exclude some people from decision-making, or to
impose taxation. Sustainable management of pasturelands, there-fore, may best be served
when community perspectives are more suitably integrated - from the planning phase through
to collaborative governance and implementation of locally agreed management options.
Agropastoral systems in Kyrgyzstan have undergone dramatic change in recent decades. In
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**Dissolving the Commons: Lessons from the Tibetan Plateau**
Emilia Roza Sulek (Huboldt University of Berlin, International Institute of Asian Studies, Leiden)

Pastoral societies inhabiting the Tibetan plateau relied in the past on different forms of collective management of pastoral resources. The full variety of these forms of management has not been documented to date and our knowledge on this topic remains fragmentary. However, the changes in the pastoral management system starting with the 1950s are well documented. They took shape of a series of state-initiated reforms introduced with the purpose of making the pastoral production economically more effective. They were also believed to prevent environmental destruction or mitigate consequences of processes such as desertification caused, as official analysts in China say, by careless use of the commons. This paper presents changes in the pastoral management system in the Tibetan pastoral regions of Western China introduced between the 1950s and today with stress laid on the current situation. The example used is a pastoral region of Golok located in the north-eastern part of the Tibetan plateau, Qinghai Province. The author presents different approaches to the problem and asks about consequences of the current view of how the commons should be used or controlled for the local pastoral society. She asks how do the pastoralists mitigate these consequences to attain something what, from their perspective, is economically wiser and vital for the functioning of the pastoral society.
#C37 – The commons in (post-) conflict zones
Wednesday 11 May 2016, 16.30-18.30, Main Building, Room 304

Convenor:

Han van Dijk (African Studies Centre, Leiden)

Over the past decades an increasing area of the world’s commons has been part of zones where political instability and civil conflict has deeply affected the lives of the population. Some areas have been beyond control of the state for decades, such as in South Sudan, parts of Afghanistan, DRC and parts of Colombia, India and South-East Asia, where rebels effectively controlled territory for many years. This has also affected the ways in which local people managed their land and natural resources. In this panel we want to take stock of the influence of conflict on the institutions and the management of the commons. Despite the fact that these conflicts are often local, the ways in which they are managed remain embedded in global systems of global governance, and actors refer to global discourses of security. As a result, conflict management is a ‘glocal’ field of study by nature. We are interested not only in how institutions and management evolve in conflict areas, but also in the dynamics of post-conflict situations. We would like to focus on questions like: Does the disruption caused by conflict situations weaken local level institutions for the management of the commons and opens up possibilities for powerful (global) actors to appropriate commons during and after conflict? Do armed conflicts lead to the militarization of natural resource management? What are the consequences of the proliferation of small arms for the institutions and management of natural resources? Do people develop new institutional set-ups during periods of conflict, independent of or in collaboration with government and civil society actors that empower them in post-conflict situations? What are the short and long term consequences of conflict and changes in institutions for the sustainability of the commons?

Paper Contributors:

**Traditional hunters, power relationship and common pastoral resource management in post conflict context of North Côte d’Ivoire**
Gilbert Fokou, Seydou Kon, Bassirou Bonfoh (Centre Suisse de Recherches Scientifiques en Côte d’Ivoire)
Roch Yao Gnabeli, (Université Félix Houphouet Boigny Abidjan)

**Making territory: War, post-war and the entangled scales of contested forest governance in mid-Western Nepal**
Sarah Byrne, Benedikt Korf (Department of Geography, University of Zürich)
Andrea Nightingale (Swedish University for Agricultural Studies)
Cultural meanings of nature: local environmental governance and empowerment practices in the context of agrofuel production. The case of Colombia (cancelled)

Maria del Pilar Ramirez Gröbli (Center for Global Studies, University of Bern)
# Digital commons in a "glocal" world

Friday 13 May 2016, 10.00-12.00, Hallerstrasse 6, Room 205

Convenor:

Wouter Tebbens (Free Knowledge Institute)

Paper Contributors:

**Digital DIY and Commons-based production**
Wouter Tebbens (Free Knowledge Institute)

Digital Do-It-Yourself (DiDIY) is a recent socio-technological phenomenon which stems from the widespread availability of digital devices that support the convergence of physical (“atoms”) and informational (“bits”) components (ABC), as well as the growing accessibility of related knowledge and data through open online communities.

Examples include digital fabrication like 3-Dimensional Printing and digital sensor networks, which are designed and deployed by (communities of) people for their personal use. These activities typically take place in so called FabLabs, hacklabs and makerspaces, where members share, help each other, learn, design, prototype and make artistic and practical products.

In this paper we will argue that not all, but large parts of Digital DIY can be considered as commons, including much of the machine and product designs (considered “Open Source Hardware”), the space and the practice of knowledge sharing, replicability, mutual aid.

While Digital DIY and commons product designs (like “Open Source Ecology”) might suggest a more sustainable and ecological model, they pose serious challenges to the current legal system. We will identify four main challenges, related to IPR, Repair, Telecom and Product Liability regulations.

First, 3D printing enables us to replicate broken parts of our products, repair or upgrade them cheaply, and generally extend their lifetime and usefulness. However owners of exclusive rights over those products are pushing for stronger protection of their “intellectual property”. How can we reclaim our Right to Repair, defined as: 1) design for repairability; 2) permission to repair and tinker with one’s products and 3) permission for independent third parties to provide repair services?

Major manufacturers have a vested interest to control the use of their products. Some even go so far as to consider buyers of their products as mere “licensees”, thus making both self-repair, and legitimate control of how they work unnecessarily difficult, if not plain illegal.

Second, Open Source Hardware emerges as a growing paradigm to develop commons-based product designs. Knowledge is shared globally while physical production takes place in small(er) scale, more locally oriented manufacturing processes. However, what are best practices to protect the collective knowledge, and how can people make a living?

Third, the so called “Internet of Things” and “Smart Cities” promise to reduce waste and abuse of primary resources in all fields from agriculture to pollution, parking and home appliances, thereby collecting huge amounts of “personal” data. Centralised implementations of these technologies, however raise serious privacy issues. DIY, that is bottom-up built data and sensor networks man-aged as Commons, instead, may do better assuring people's privacy and autonomy. However, various legal proposals are posing serious threats to such initiatives.
Fourth, our society is used to industrial players being responsible for proper working products. However with the growth of the maker movement, Open Source Hardware and of (Digital) DIY in general, this responsibility can't be taken for granted anymore. This requires a change in awareness and in liability legislation.
We will discuss these and other topics in the context of Digital DIY and commons-based technology for a more sustainable society.

**guifi.net, a sustainable implementation of the commons in the telecoms sector**
Roger Baig (Guifi.net), Leandro Navarro (Department of Computer Architecture)

**eReuse.org a digital device commons for circular economy**
Leandro Navarro (Department of Computer Architecture, Barcelona)
David Franquesa (Electronic Reuse)

**In search of a value regime for digital commons**
Marco Berlinguer (IGOP, Universidad Autònoma de Barcelona)
#C39 – Theoretical debates on institutions for the management of the commons  
Friday 13 May 2016, 10.00-12.00, Hallerstrasse 6, Room 203

Convenor:

Tobias Haller (Institute of Social Anthropology, University of Bern)

This panel deals with new theoretical approaches to address new challenges in the management of the commons. It aims specifically to discuss approaches which try to bring together the analysis of issues of power and ideology and address the issue of genesis of institutions in a wider scope than most theories framed in the rational choice and collective action theorems and notions of polycentricity by including elements of political ecology, human rights, institutional change and the new politics of sustainable redistribution. We will make a link to European contexts but also extend this to the „glocal“ world because European colonial expansion and the globalized market as well as broader discourses of state and issues of local co-management development had and still have a central impact on the commons on all scales in all societies.

Paper Contributors:

**Towards a New Institutional Political Ecology: How to marry external effects, institutional change and the role of power and ideology in commons studies**  
Tobias Haller (Institute of Social Anthropology, University of Bern)

In a review paper on institutional approaches in economics, social sciences and humanities Olivier de Sardan (2013) has pointed out that there is no link between political economy inspired old institutional and a neo-institutional approach. The former addresses power issues while the latter focuses on institutions as a kind of - if I summarize - ‘anti-politics machine cutting transaction cost’ (to use James Ferguson’s term). However, if we look at older works of Douglass North and colleagues it becomes clear that the labelling of new institutionalism being void of power is wrong. In economic anthropology a new institutionalism framework proposed by Jean Ensminger (1992, extended by Haller ed. 2010, Haller 2013) proposes further ways how these two separate fields of debates could be linked together. This is especially suitable for a new theoretical reflexion on the commons: Based on the understanding on how common property institutions also function (issue of transaction costs) Ensminger developed a model in which she integrates economic changes with notions of political economy and ecology. External factors influence the value of land, a specific common pool resources or a resources context. Such changes then affect an already contextualized power configuration of actors, which is changing their bargaining power and their options to select and transform the institutional setting (for example forms of property rights of common pool resources). Ensminger, however, adds an important element which I would like to explore further: In the contestation over how a common pool resource shall be managed (what type of rule shall be applied) actors try to seek resources of legitimacy, which are found in ideologies. I propose a further extension of this aspect in order to unpack ideologies as containing discourses and narratives which provide legitimacy and options to increase bargaining power of an actor over another and facilitate the choice within a context of institutional pluralism. The divergent power constellations and where these originate from in the context of use and overuse of natural
common pool resources is part of the classical analysis of political ecology as its constituting element asking who and how actors gain access to resources through a historical process (see Blaikie and Brookfield, Zimmerer, and others). I therefore propose to marry the political ecological context of divergent actors’ interests with dynamic external and internal as well as market driven dynamics that lead to justification strategies and the selection of institutional settings and finally to behaviour and distributional effects. Litigations over a pasture to be transformed into an irrigation scheme in Zambia will illustrate the way the 'New Institutional Political Ecology' can be used.

**On the societal embeddedness of commons**

Johannes Euler (Institute of Advanced Study in the Humanities, University Duisburg-Essen)

This predominantly theoretical contribution shall shed light on the question how commons, as institutional arrangements of localized social practices (commoning), are embedded into the societal structures of Western globalized capitalism. The starting point is the formulation of the human-society and human-nature relationships in dialectical terms (Görg 1999) which is understood as the overarching frame. Within that frame, on a more local and concrete level, the social-ecological systems approach (McGinnis & Ostrom 2014) shall function as organizing framework of analysis. In this framework the variable social, economic and political settings (and its interaction with the respective action situations) is of high interest as it tries to grasp the relation between the local practices and the surrounding societal structures. Changes in these settings may affect very local action arenas as well as actors’ perceptions and bases of (e) valuation, and therewith institutional designs. This contribution attempts to conceptually reconcile / integrate a basically dialectical standpoint and the systems approach in order to formulate how the embeddedness and “mediatedness” of commons can be understood (cf. Becker 2011).

In a second step, commons will be described as defining an institutional logic (Thornton, Ocasio & Lounsbury 2012). This "commons logic" can be distinguished from others, such as the state, the market and the family logic. This makes possible to draw lines of distinction between commoning and other practices which helps to conceptualize commons with respect to other forms of institutional arrangement. The argumentation ends with an understanding of commons as being a social form (determined by commoning) that is distinct from the commodity form (cf. Meretz 2014). In societies dominated by the latter, ideologies and discourses are heavily influenced and deviant institutional logics (such as the commons) threatened. This may lead to enclosures not only of specific resources but also of imaginaries and human minds (Boyle 2008).

The two parts of the contribution help to understand the relationship between commons and the respective environments and, under the current conditions, why commons are under threat. In the context of the conference, this argumentation is especially interesting as it provides tools to understand how institutional processes are entangled across as well as within different (for example, but not limited to geographical) levels. This may help to understand why the interaction with large-scale companies, as one of the prototypes of the current form of globalized capitalism, is problematic for commons and commoners in many respects. Enclosures (or the treat thereof) on multiple levels are key. The argumentation shall be made plausible with the help of several real-life examples.
Appropriation and enclosure in the commons: towards a theory of claim making
Angela Kronenburg García (African Studies Centre Leiden)
Han van Dijk (African Studies Centre Leiden)

Sikor & Lund made a call to study the 'grey zone' between access and property, i.e. when people attempt 'to secure rights to natural resources by having their access claims recognized as legitimate property by a politico-legal institution' (2009: 1, 6). We respond to this call by proposing that a focus on the way people make claims best illuminates the process of appropriation and enclosure that sees the practice of access to the commons morphing into a situation in which individual property is increasingly becoming the norm. This paper aims to make a theoretical contribution to questions around access and property in the context of commons' enclosure by adopting a political ecological approach to the practice of claim making. It explores three ways of claim making. One is what we call ‘grounding claims’ which is the practice of inscribing and altering the landscape with visible markers that are socially and/or legally understood as conveying the notion of individual property. A fence is an example of a grounded claim. The second is ‘talking claims’ that refers to the face-to-face spoken claims and counterclaims between conflicting parties in the process of negotiating property that is typically evident during customary land dispute meetings or court cases. A third way of making claims that will be explored is through (counter) mapping. By looking at the power relations of the actors involved in claim making and the institutional changes that are involved, the paper will discuss why some and not others succeed in having their claims recognized as property and how this co-shapes the new rules of the game. Ethnographic material collected among the Loita Maasai in Kenya serves to illustrate the theoretical points being made.

Recognition and the Cultivation of Sub-National Authority in Natural Resource Management in Africa
Phil Rene Oyono (Center for International Forestry Research)

This communication explores the issue of the construction of sub-national authorities through recognition, representation and partnership in the management of African commons. Donors, international organizations, national governments, projects and a variety of national legal, policy, decisional and programmatic instruments are developing recognitive circuits, thereby transferring powers and resources to sub-national institutions and cultivating forms of authorities. This process is called “recognition from the top”. As a result of a studying up effort, this communication reviews strategies and technologies of institutional recognition. By empowering some unrepresentative sub-national institutions, upper level institutions do not promote accountability and local democracy, insofar as misrecognized institutions are marginalized and cannot influence decisions about natural resource management and associated benefits – viewed as common property resources. Moreover, subnational institutions recognized from the top are not always recognized from below and representative local institutions are not recognized from the top. Local governments and public authorities suffer from misconception and mal-recognition. Conversely, a cortege of committees, local NGOs and private companies are recognized in the institutional geometry. Upper level institutional technologies have generated two categories of local institutions – those who have authority and resources and those who don’t have. Using social and political theory we recommend a rethinking of the whole vision of partnership and the shaping of institutional processes based on inclusion and mutual respect. Obviously, this communication is complemented of the other communications presented in this panel. How representative are
institutions/authorities chosen and recognized “from above” in natural resource management processes in East, West and Central Africa? Are upper-level institutions engaged with subnational partners not, in the end, shaping a kind of privatization or capture of the commons? This paper gives a set of responses to these interrogations.
The Credit Commons is a proposal for new infrastructure to link new and existing grassroots local exchange communities and commercial trade exchanges with an open exchange protocol. Such an infrastructure for inter-community exchange cannot be considered merely as a technological project but requires a sociotechnical approach. Ideally the approach should be participative, involving not only the exchanges but other organisations such as academic institutions. Existing complementary currency interchange solutions such as the ZART system (Huber et Martignoni, 2013) based around Zurich and CES in Cape Town have fallen short of expectations because of both technical and social constraints, but they demonstrate clearly the need for a more formal, more accessible solution which we propose be called ‘The Credit Commons’. In this sense, the proposed infrastructure would operate on the following levels developed in this paper:

Mutual credit: inclusive, cross-community participation, based on local communities accounting systems and mutual credit principles. Business entities engaging in bartering, online payments and transactions services, timebanks, LETS each with their respective time management systems are possible Credit Commons nodes.

The Commons Market, an awareness mechanism for inter-community exchanges and transactions, including a community noticeboard, an open marketplace, where entities can exchange directly from their accounting systems and where new members will be, transparently, integrated.

The open payments layer is the technical backbone of the Credit Commons. Existing commercial and grassroots accounting systems would connect to the credit commons through a public API, but would be granted credit only by actors who trust them.

The Credit Commons implies a participative design methodology, integrating a horizontal gender approach on Credit Common’s impact, social metrics and evaluation.

Credit commons is an initiative designed and supported by various organizations including the Ynternet.org Foundation, the Community Forge Association, Community Exchange Systems, Allmende co-op in Austria, the Biomimicry Swiss Network and the University of Applied Sciences Western Switzerland (HES-SO) and others.
Common cause of the crowd
Jadwiga Glanc (Jagiellonian University in Kraków, Poland)

The main problem in the maintenance and development of commons is - in the most cases – the scarcity of funds, which can be used for the cause. There is a factual limitation to the money spend on any given issue, which derives from the necessity of making a choice between different projects or causes. There is also a subsequent question of whether or not the choice made by the managing (or financing) authority has been the correct one.

Today, however, exists a new way in which the commons could be developed and maintained – the crowdfunding phenomenon, which has lately gained in importance as a way of financing, has a potential to be a solution to many arising problems. The crowdfunding phenomenon is based on the funding of projects by the community (in most cases via Internet) and this way of raising money is ideally suited to many initiatives based in the local communities.

In many instances projects of local communities are not put into motion, and the people themselves are not organized well enough to promote their idea. The crowdfunding platforms and communities make it not only easier to gain money but also make it possible to communicate more efficiently, as well as even monitor the development of any given issue. The idea is to create a field of co-operation between administrative authorities and local communities that would promote usage of crowdfunding and use it as a supplementary way of supporting the commons.

Investors as Neighbours – A story of becoming
Christina Gabbert (Max-Planck-Institute of Social Anthropology, Halle)

In the past decade, hitherto remote areas in Eastern Africa have increasingly become zones for investment and industrialization. Large-scale agricultural projects as well as extractive enterprises are operating in pastoral and agro-pastoral territories at an increasing pace. Decisions in companies’ headquarters e.g. in Europe far away from the pastoralists’ territories on the ground have direct impact on the lives of local populations, their economy and culture. While new neighbourhood relations are created, power dynamics seem unidirectional. Yet the impact of local customs and livelihoods might also impact investment schemes.

I will present cases from Ethiopia and Kenya that shed light on the effect of corporate social responsibility schemes and community outreach programmes of extractive enterprises within distinct political economies. The formal CSR agenda or Social Investment programmes are compared to the perception of social activities by local populations to describe how neighbourhood relations unfold. When CSR approaches contain respect for cultures and customs, this might also have (surprising) effects on local populations and investors alike. Yet, does this if at all have significant impact on investment schemes in the long run, i.e. provide space for doing things differently in the encounter of global neighbours with different socio-economic ideologies?
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