# Resilience and Development: Mobilizing for Transformation



THIRD INTERNATIONAL SCIENCE AND POLICY CONFERENCE

MAY 4-8, 2014 LE CORUM Montpellier, FRANCE

## PROGRAM & VISITORS GUIDE

www.resilience2014.org





## The French node of the Resilience Alliance network,

led by the Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD) and composed of the Centre National de la Recherche Scientifique (CNRS), the Institut national de Recherche en Sciences et Technologies pour l'Environnement et l'Agriculture (IRSTEA) and the Institut National de Recherche Agronomique (INRA),

## with their partners of Agropolis International\*:

Bioversity International, the Ecole Pratique des Hautes Etudes (EPHE), the Institut Agronomique Méditerranéen de Montpellier (CIHEAM), the Institut Français de Recherche pour l'Exploitation de la MER (IFREMER), the Institut de Recherche pour le Développement (IRD), the Institut des sciences et industries du vivant et de l'environnement (AgroParisTech), Montpellier SupAgro, the Universities of Montpellier 1 (UM1), Montpellier 2 (UM2), Montpellier 3 (UM) and Perpignan Via Domitia (UPVD)

# and the Stockholm Resilience Centre and Resilience Alliance\*\*





# welcome you to Resilience 2014 in Montpellier!

\*The association Agropolis International is working in the field of agriculture, food, biodiversity and environment. It gathers a large range of stakeholders and partners involved in economic development. This platform is open to the development of the Mediterranean and tropical regions. Agropolis International is an original and unique place for exchanges and building partnerships. \*\* The Resilience Alliance is a research organization comprised of scientists and practitioners from many disciplines who collaborate to explore the dynamics of social-ecological systems. The body of knowledge developed by the Resilience Alliance encompasses key concepts of resilience, adaptability and transformability and provides a foundation for sustainable development policy and pratice.

## WELCOME DEAR RESILIENCE 2014 PARTICIPANT,

Since we last met in Arizona in 2011, we have witnessed a series of unexpected events leading to major changes around the world: from Fukushima and the Mediterranean revolutions following the "Arabic Spring" to the social crises riveting through Europe and the now recurring "airpocalypse" in China. This puts resilience thinking in the spotlight, as we urgently need tools to analyze the changes we experience and to accompany the transformation of our societies in an equitable and sustainable way. As expressed already during Resilience 2011, there is a need for a broader exchange around the complex resilience concept and increased openness between different types of disciplines and stakeholders who work with resilience issues and development.

This conference is therefore devoted to dialogue: dialogue between different scientific communities, between the arts and science, between science and policy, between resilience scholars and development practitioners, and between the "North" and the "South". These dialogues have been prepared by a series of "warm up events" that over the past year has been organized in Montpellier as well as Didima (South Africa). During the next five conference days, we have deliberately chosen a meeting format that will facilitate participation and exchange, such as speed-talks, panels, plenary debates, participatory games and forum theater.

You will be part of a rich program that includes circus, music, dance, sensing, socializing, wining and dining!



All of this has been made possible by the backing of numerous sponsors among which: the AGRO Labex, the BRGM, the CeMEB Labex, the CGIAR Research Programs of Integrated systems for the Humid Tropics & Water, Land and Ecosystems(WLE), and the CIFOR, the CIRAD, the city of Montpellier, the CNRS, the IRD, the IRSTEA, the Languedoc-Roussillon Region, Montpellier SupAgro, the Nature, Sciences, Sociétés – Dialogue, the "Réseau National des Systèmes Complexes (RNSC), Resilience Alliance, the Stockholm Resilience Center, and the Université Montpellier 3. We would like to thank all the contributors for their generous donations.

A special thank is dedicated to the main organizers of the conference: the organizing committee and Martine Antona, Patricia Doucet, David Levrel, Megan Meacham, Daniel Ospina and Hugo Picard.

## We sincerely hope that you will enjoy yourselves!

François BOUSQUET, Head of the French Node of Resilience Alliance, Senior researcher, UPR GREEN, CIRAD

Aurélie BOTTA Senior Researcher, UPR GREEN, CIRAD

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## AIM AND VISION

Resilience, as the capacity to deal with change and continue to develop, relates to ecological dynamics and governance questions associated to specific resource systems (agroecosystems, fisheries, forests, rangelands, marine and freshwater ecosystems), and to global issues such as biodiversity conservation, urban growth, economic development, human security and wellbeing. Human societies are an integral part of the biosphere and sustainable social development depends on the continuous generation of essential ecosystem services. Thus ecosystems change is often considered as one factor decreasing social and ecological resilience. Over the past century we have entered a new era where human activities have emerged as a main force shaping the biosphere from local to global scales, as reflected by climate change, vulnerability in the economic system, large losses of biodiversity, and irreversible changes in ecosystems. This is also a time of unprecedented development challenges: intransigent poverty and inequality constitute a major threat to human welfare and to planetary sustainability. There is an increasing interest in the transformability of social ecological systems i.e., the capacity of society to change the system's state variables when current trajectories become untenable. But a critical dilemma faces humankind: how can more equitable and beneficial social development paths be stimulated in light of these challenges?

The objective of Resilience 2014 is to explore and reinforce the multiple links between resilience thinking and development issues. The concepts of Adaptation, Transformation and Development are central and common to several research communities, including Resilience in social and ecological systems, Ecological Economics, Environmental Change, Farming Systems (among others). Besides, the term resilience is now being used more widely in policy circles and policy debates. Beyond the academic sphere, business and development communities are increasingly using the resilience concept in their discourses. By now they have built their own sets of notions and practices of resilience, although these meanings sometimes may be at odds with scientific interpretations of resilience. Focusing on resilience, but firmly rooted in the belief that a diversity of approaches can inform each other, the conference will offer the opportunity to articulate and debate their specific paradigms, concepts and methodologies. Complex problems require diverse approaches that can generate a constructive debate, and eventually lead to more suitable solutions.

During this conference the diverse perspectives on resilience held by representatives from government, large international organizations, the business sector and other major actors from various countries will add to the academic debate on the challenges facing social development.

## **THROUGH DEVELOPMENT LENS** & DIALOGUE

To engage participants in relating and sharing knowledge on resilience and development, the conference organizers have favored certain contents and settings for Resilience 2014.

## Dialogue between Social-ecological System Resilience and Development Resilience communities

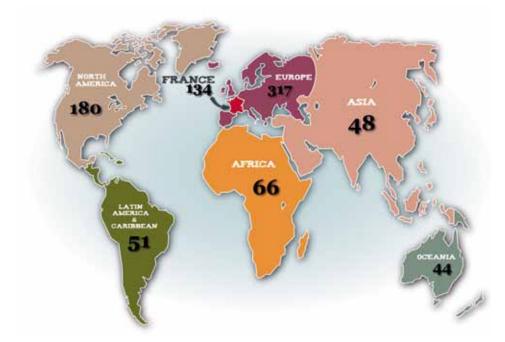
Resilience 2014 gathers participants from the two communities to discuss their points of convergence and divergence, and find potential parallels in terms of theories and practices. Plenary Dialogues and several panels (including the Opening Ceremony panel) replace regular invited and plenary talks.

The Development viewpoint on resilience will be voiced by a diversity of stakeholders: "Action contre la faim", Canadian Foodgrain Bank, Care Earth Trust, Caritas, the FAO, several farmers associations, the Global Indigenous Information network, members of different governmental ministries, the Oxfam, the SOROS foundation, the Transition Town network, World Food Program, and the WWF, to name a few of the represented organizations.

This dialogue feeds specific thematic pathways during the conference such as "Resilience Measurement & Assessment", "Analyzing and Promoting Change: Adaptation and Transformation ", "Security and Vulnerability issues" & "Management, Governance, Stewardship, Solidarity" (the thematic pathways are presented on page 11 of this program).

#### **Dialogue between North and South**

Participants from 67 countries will attend the conference, with two thirds of the represented countries classified as less developed countries or LDCs (according to the IMF classification) and twelve are categorized as least developed countries (according to the FAO). Quantitatively, 19% of the conference participants come from LDC.



The diversity of participants from this part of the world will ensure a richness of experiences and viewpoints in the discussions. More than 10% of the conference budget (67k€) has been dedicated to invite participants from the Global South and especially from Africa where many of the least developed countries are located.

#### Participants from less developed countries

Less developed countries (IMF) participation



Other countries 81% 8% 11%

Less Developed Countries (LDC) 19%, included 8% invited and sponsored LDC participants

#### **Dialogue between local development practitioners and scholars**

The first day of the conference takes place in 14 different sites in the Languedoc-Roussillon Region close to Montpellier, to anchor resilience in local issues. These off-site sessions will allow discussion and exchange with local stakeholders (see page 10 for details).

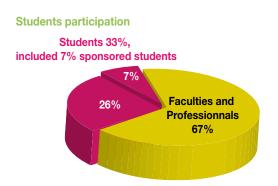
#### **Dialogue between Citizens, Arts and Science**

As with the previous conferences in Stockholm and Arizona, Resilience 2014 associates the arts as an additional media to express and exchange viewpoints and feelings on the relationship between Man and Nature. Artistic workshops and performances are planned throughout the conference and define a specific thematic pathway "Arts and Sciences" (see page 11 and pages 48-49 for details).

In addition to the arts perspective, two sessions on science and society will focus on participative approaches to foster dialogue among a diversity of participants, including the general public. One uses Forum Theater and the other one, called the "Resilience Plaza", uses table and role-playing games (see page 50 for details).

#### **Future development**

As the French poet, Louis Aragon, said *L'avenir de l'Homme est la femme* (Women are the future of Mankind). The organizers are pleased to announce that this conference audience is close to the perfect gender parity with 49,2% female and 50,8% male participants.



Students represent one third of the conference participants. A series of activities are specifically student-oriented: a welcome cocktail on Sunday afternoon 16:30 at the CORUM, a debate on future careers: "Cultivating a Community of Young Scholars: Where to from here?" on Wednesday 13:00, a Master Class on Tuesday evening (open to the public), a twitter account (@socresilience14), and a range of specific sessions. See the full program and the website for further details. A specific fund has also been dedicated to sponsor students.  $43,5k \in$  partly financed the participation of 52 students from all over the world.

Finally, the organizers of Resilience 2014 have tried to minimize the overall environmental impact of the conference, e.g. by using recyclable material for the participant kit, and by favoring locally grown products for the dinner and the lunches.



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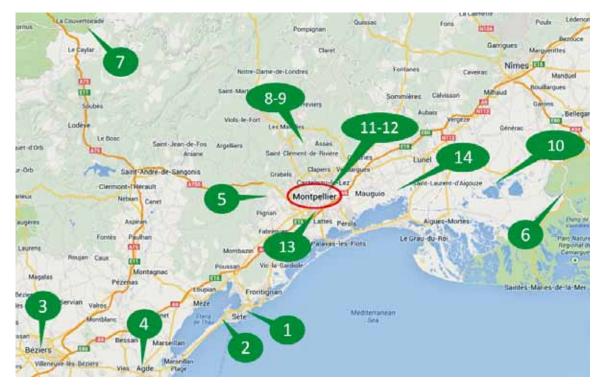
Nathalie VILLEMEJEANNE Agropolis International, France

## **PROGRAM** OVERVIEW

Ρ	RO	GF	RAM OVERVIEW						ERVIEW					
	Thursday May 8		Plenary Session Terry HUGHES - Fikret BERKES Marine Systems, Community & Global Resillience 8:30 - 10:00	Coffee break/Poster (20 mn)	Parallel Sessions 10:20 - 11:20	Artistic Activities	splanade (public event) 12:45 - 13:30	ak (1 hr)	Artistic Activities	essions 16:40	oster (30 mn)	nary Session remony 18:10		PROGRAM OVERVIEW
	Thursda		Plenary Terry HUGHES Marine Community & G 8:30 -	Coffee break/I	Parallel S 10:20 -	Parallel Sessions 11:30 - 12:30	Circus Esplanade (public event) 12:45 - 13:30	Lunch break (1 hr)	Parallel Sessions 14:30 - 15:30	Parallel Sessions 15:40 - 16:40	Coffee break/Poster (30 mn)	Conclusion Plenary Session Closing Ceremony 17:10 - 18:10		
Wednesday May 7			Plenary Session Johan ROKCSTRÖM - Melissa LEACH Planetary boundaries 8:30 - 10:00	Coffee break/Dance (20 <i>mn</i> )	Parallel Sessions 10:20 - 11:20	Artistic Activities	Lunch break (30 <i>mn/2 hr</i> )	i : (	Hesilience Plaza (public event) 13:00 - 15:30	Artistic Activities	Coffee break/Dance (30 mn)	Artistic Activities	Conference Dinner 19:00 - 22:30 Concert 22:30 - 23:00	
	Wedneso		Plenary Johan ROKCSTRÖ Planetary 8:30 -	Coffee break/	Parallel 10:20	Parallel Sessions 11:30 - 12:30	Lunch break		Parallel Sessions 14:30 - 15:30	Free Sessions Poster 15:40 - 16:40	Coffee break/	Parallel Sessions 17:10 - 18:10	Conferer 19:00 Cor 22:30	
	Tuesday May 6	8:00 Poster Installation	Plenary Session Neil ADGER - Luca ALINOVI Measuring resilience 8:30 - 10:00	Coffee break/Poster (20 mn)	Parallel Sessions 10:20 - 11:20	Artistic Activities	Circus CORUM 12:45 - 13:30	Lunch break (45 mn)	Artistic Activities	Parallel Sessions 15:40 - 16:40	Coffee break/Poster (30 mn)	Artistic Activities	S. van der Leeuw Public speech 18:30 - 20:00	
	Tuesda	8:00 Poster	Plenary Neil ADGER - Measuring 8:30 -	Coffee break/	Parallel { 10:20	Parallel Sessions 11:30 - 12:30	Circus ( 12:45	Lunch bre	Free Sessions Poster 14:30 - 15:30	Parallel 1 15:40	Coffee break/	Parallel Sessions 17:10 - 18:10	Master Class 18:15 - 20:00	
	Monday May 5		8:30 Registration	Aegistration Opening Ceremony 9:00 - 11:00 9:00 - 11:00 11:00 - 18:00										
	Sunday May 4								Registration	& Exhibition Installation 14:00 - 18:00		Student Welcome Cocktail 16:30 - 18:00	Conference Welcome Cocktail 18:00 - 20:00	
DDC	GRAM												Res <sup>®</sup> ence2014	9

The idea of the off-site sessions is to hold **the academic presentations in a setting that is relevant to the session theme**. These presentations and discussions take place away from the conference center in small groups composed of local practitioners and registered conference participants. The aim is to **create a context that favors exchanges between researchers and local stakeholders who will draw on their own experiences and share some of the practical challenges they face.** The off-site sessions are a unique opportunity to engage local stakeholders and practitioners and to facilitate dialogue while highlighting the application of resilience research in a variety of social-ecological systems surrounding Montpellier.

- On Monday, May 5, all sessions are held off-site following the opening plenary. There are no sessions taking place at the Corum during the off-site sessions.
- All registered conference participants have to register online and in advance for the off-site session of their choice.
- Buses leave the CORUM following the opening ceremony.
- Lunch boxes are provided to participants and buses return to Montpellier before 19:30.



	Off –Site Sessions theme	Location
1	Marine tipping points and small scale fisheries	Sète
2	Coastal Vulnerability and Resilience facing climate change	Sète
3	Flood management and Watershed governance	Béziers
4	Crisis, subsistence farming and social fabric	Agde
5	Agriculture and Climate	Murviel-lès-Montpellier
6	Agriculture and Water	Regional Park of Camargue
7	Pastoralism	La Couvertoirade
8	Agroforestry and Ecosystem Services	Domaine de Restinclières
9	Agrobiodiversity	Domaine de Restinclières
10	Resilience and Conservation	Nautal Center of Scamandre
11	Green and Blue Urban Resilience	Montpellier surroundings
12	Socio-Ecological Urban Resilience	Montpellier surroundings
13	The resilience of business	IBM Montpellier
14	Territoire, sense of place and socio-ecological dynamics	Candillargues

#### Resilience2014 11

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## Thematic pathways of the conference

Resilience 2014 seeks to explore different perspectives on change in social-ecological systems and the multiple links that exist between resilience thinking and contemporary development issues. During the preparation of the conference, the scientific committee has identified six overarching conference themes: Development challenges through a resilience lens, Trade-offs and synergies, Analyzing and promoting change and transformation, Knowledges, Whose development, whose resilience?, New methodology and tools. More than 700 papers are accepted for presentation during the conference and 165 different sessions will be held. After the selection process, in which the papers and sessions were associated, some clusters emerged. Some of these clusters are similar to the conference themes, some provides more focus than the themes, and some are related to specific types of systems.

These clusters have been grouped under "Thematic pathways". The idea is to provide a kind of road map for the delegates who are interested in particular topics and scientific questions (sessions can be part of several different pathways). These thematic pathways also provide us with a structure to help synthesize the outcomes of the conference.

This road map is provided with the number of the asssociated sessions, see next page.

Please use the forum http://www.resilience2014.org/forum ) to ask questions, share your thoughts and interact. Your contributions will be used for a collective synthesis on the conference.

> **Resilience Measurement** & Assessment



Knowledge Sharing, Knowledge Circulation

Analyzing and Promoting Change: Adaptation and Transformation



Regional Resilience, Sense of place, **Community Resilience** 

Social Sciences Perspectives

on Resilience



Traiectories, Boundaries,

New Methodologies and Tools

Security and Vulnerability issues

THEMATIC PATHWAYS OF THE CONFERENCE

Stewardship, Solidarity

Management, Governance,

**Ecosystem Services** 

Business, Innovation, Industry, Insurance

Arts and Sciences

Marine Resilience

Rural (agriculture-forest) Resilience

Urban Resilience

WE WISH A GOOD AND INSPIR













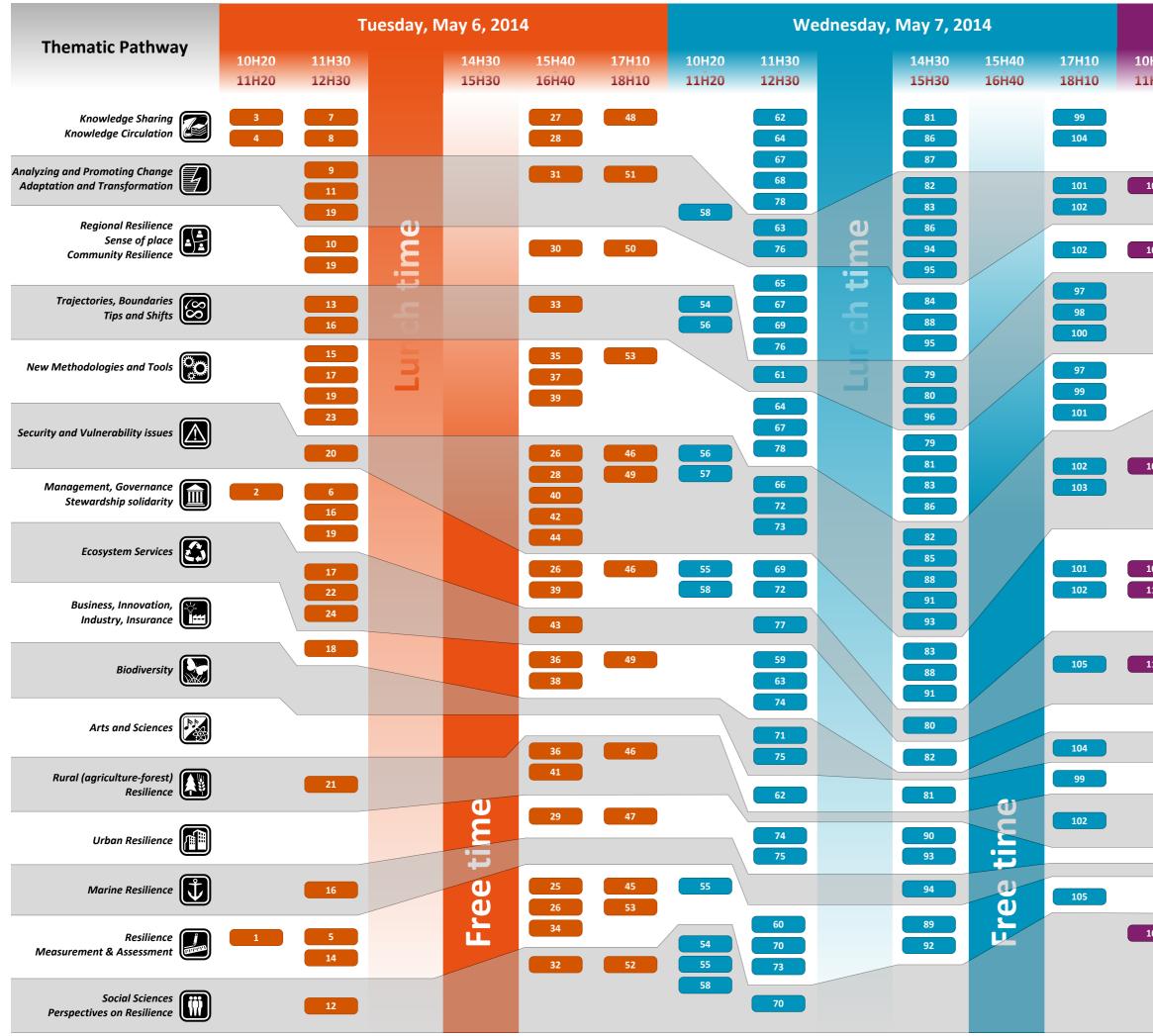












Thursday, May 8, 2014						
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108	124		133	153		
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			145	165		

#### Monday, May 5, 09:00 - 09:30

**OPENING CEREMONY - PASTEUR** 

Bernard Hubert, Agropolis International - Max Lévita, Mairie de Montpellier - Aurélie Botta, Organizing Committee

#### Monday, May 5, 09:30 - 11:00

#### **SESSION - PASTEUR**

Resilience and Development: Mobilizing for Transformation -Francois Bousquet, Organizing Committee (moderator)

Panel on Resilience and Development : Mobilizing for Transformation - Brian Walker, President of the Resilience Alliance Board - H.E. Ambassador Mahboub Maalim, the Executive Secretary of Integovernemtal Authority on Development - Jean-Pierre Halkin, Head of Unit on Rural Development, Food Security, Nutrition, Directorate General for Development and Cooperation, EuropeAid, European Commission - Jean-Marc Châtaigner, Directeur général adjoint de la Mondialisation, du Développement et des Partenariats, French Ministry of Foreign Affairs - Cees Wittebrood, Head of Unit ECHO.B.3, East, West and Southern Africa, Indian Ocean, Directorate General Humanitarian Aid and Civil Protection, European Commission

#### Monday, May 5, 11:00 - 18:00

## Off-Site 1 - Marine tipping points and small scale fisheries (Ifremer - Sète)



Achieving Resilience in Small-Scale Fisheries: Applying Emerging Frontiers in Social-Ecological Systems Research - John Kittinger, Elena Finkbeiner, Christina Hicks

Achieving Resilience in Small-Scale Fisheries : Applying Emerging Frontiers in Social-Ecological Systems Research - John Kittinger, Hawaii Fish Trust, Conservation International, Stanford University, Center for Ocean Solutions - Elena Finkbeiner, Stanford University, Hopkins Marine Station - Christina Hicks, Stanford University, ARC Centre of Excellence for Coral Reef Studies - Joshua Cinner, ARC Center of Excellence in Coral Reef Studies, James Cook University

Assessing the resilience of small coastal fisheries, peculiarities and return of experiments - Christian Chaboud, Institut de Recherche pour le Développement

**Emerging frontiers in social-ecological systems research for sustainability of small-scale fisheries: an introduction** - John Kittinger, Stanford University, Center for Ocean Solutions, Hawaii Fish Trust, Conservation International

**Evaluating Social and Ecological Vulnerability of Coral Reef Fisheries to Climate Change** - Cindy Huchery, Australian Research Council Centre of Excellence for Coral Reef Studies, James Cook University

Mitigating the effects of external drivers through diversification: lessons from small-scale fishing cooperatives in Baja California Sur, Mexico - Elena Finkbeiner, Stanford University, Hopkins Marine Station

**Overcoming social-ecological traps in coral reef fisheries** - Josh Cinner, ARC Centre of Excellence for Coral Reef Studies, James Cook University

Synergies and tradeoffs in how managers, scientists, and fishers value coral reef ecosystem services - Christina Hicks, ARC Center of excellence for coral reef studies, James Cook University, Center for Ocean Solutions - Stanford University

The resilience of artisanal fisheries to expanding market access, technology acquisition, and migration - Daniel Kramer, Michigan State University

Two steps forward, two steps back: Navigating the transitions towards community-based marine resource management in Solomon Islands - Kirsten Abernethy, University of Exeter, The WorldFish Center



Marine regime shifts around the globe: theory, drivers, and impacts - Norström Albert

Marine regime shifts around the globe: theory, drivers, and impacts - Norström Albert, Stockholm Resilience Centre

Anticipating marine regime shifts : the limits to detection - Vasilis Dakos, Estacion Biologica de Donana, CSIC

**Community Values in Resource Governance: A Case Study from New Brunswick** - Courtenay E. Parlee, Canadian Fisheries Research Network, University of New Brunswick

Human and natural drivers of multiple coral reef regimes across the Hawaiian Archipelago - Jean-Baptiste Jouffray, Stockholm Resilience Centre

Managing resilience to reverse phase shifts in coral reefs -Nicholas Graham, James Cook University

Masked, diluted, drowned out: missing feedback signals from marine ecosystems to global markets affects governance success - Beatrice Crona, Stockholm Resilience Centre, The Royal Swedish Academy of Sciences

Networks of Drivers and Ecosystem Services Consequences of Marine Regime Shifts - Juan Carlos Rocha, Stockholm Resilience Centre

**Resilience and social thresholds in small-scale fishing communities** - Jessica Blythe, WorldFish, ARC Centre of Excellence for Coral Reef Studies

# Off-Site 2 - Coastal Vulnerability and Resilience facing climate change (Sète)



How does social change in coastal communities influence social learning? - Anne Leitch, Katrina Brown, Ywenn de la Torre, Hélène Rey-Valette

How does social change in coastal communities influence social learning? - Anne Leitch, ARC Centre of Excellence Coral Reef Studies, James Cook University

Determinants of Resilience to a Climate Change Related Extreme Weather Event: A Two Case Study of Urban Communities in Metro Manila, Philippines - Claudius Caezar Gabinete, Asian Institute of Technology

Resilience perspectives on the new Dutch flood risk management policy Multi-Layer Safety - Mathijs van Vliet, Wageningen University, Public Administration and Policy group

**Resilience, Anticipation, and Adaptation: emergent forms of governance in the face of sea level rise** - William Butler, Florida State University

The contribution of resilience thinking to the challenging future of atoll countries: the case of Kiribati (Micronesia) - Esméralda Longépée, Institut du Littoral et de l'Environnement - UMR LIENSs 7266, Université de la Rochelle-CNRS

The Great East Japan Earthquake, and Resilience as a Component of Sustainability - Junko Edahiro, Japan for Sustainability, Institute for Studies in Happiness, Economy and Society

Vulnerability and Resilience in West African Coastal Communitie: Considering Environment and Social Interactions - Alioune Kane, Awa Niang-Fall, Diatou Thiaw, Anastasie Mendy, Université Cheikh Anta Diop de Dakar

#### Off-Site 3 - Flood management and Watershed governance (Béziers)



Social-Ecological Resilience, Climate Change and Adaptive Water Governance of Regional Scale Water Systems in the United States -Nils Ferrand, Lance Gunderson, Barbara Cosens

Social-Ecological Resilience, Climate Change and Adaptive Water Governance of Regional Scale Water Systems in the United States - Lance Gunderson, Emory University

Linking the participatory evaluation of the water system vulnerability with resilience assessment in communal aqueducts to improve their performance - Gabriela Chaves, Laura Benegas, William Watler

Symbiosis or Exploitation? Assessing the Ramifications of Rural-Urban Water Transfers in Tamil Nadu, India - Shanmuga Priya Gnanasekaran, PhD Candidate, College of Architecture and Planning, University of Colorado Denver.

The role of social relations and local power structure in managing drinking water stress after natural extreme events - Raju Sarkar, Institute of Regional Science

Trans-boundary Headwater Governance in Hindu Kush Himalaya (HKH): Need for Building Regional Geo-political Resilience for Adaptation to climate change in South and East Asia - Prakash Chandra Tiwari, Kumaun University, Nainital, India

## SESSION 🔝 🗗 😭

Community Flood Resilience and Development: From Theory to Practice - Frédéric Grelot, Adriana Keating, Wei Liu, Reinhard Mechler

**Community Flood Resilience and Development: From Theory to Practice** - Adriana Keating, International Institute for Applied Systems Analysis - Wei Liu, International Institute for Applied Systems Analysis - Reinhard Mechler, International Institute for Applied Systems Analysis

Assessing socio-economic vulnerability to climate change and flood risk in Coastal São Paulo and Rio de Janeiro, Brazil: building resilience for overcoming challenges - Maria Dr Trannin, Universidade Estácio de Sá - Allan Yu Dr Mello, Universidade Estadual de Campinas – UNICAMP/NEPAM - Juliana Dr. Farinaci, Universidade Estadual de Campinas – UNICAMP/NEPAM

**Communities, institutions and flood risk, mobilising social capital to improve community resilience** - Andrew Fox, University of Plymouth

**Development, Disasters, and Decision-making: Adaptive Governance for Rural and Urban Flooding in India** - Navarun Varma, The Energy and Resources Institute

Non-structural measures for integrated flood risk management in socio-ecological systems - Joanne Linnerooth-Bayer, Wei Liu, Anna Lorant, International Institute for Applied Systems Analysis

Resilience and Transformation: Analysis at the Boundaries of Adaptation and Mitigation - Catherine Butler, Cardiff University

Resilience of an irrigation scheme in a flood context: the case of Chokwè, Mozambique - Maira Fares Leite, Gestion de l'Eau, Acteurs et Usages

**Resilience thinking in community flood risk management: from theory to practice** - Adriana Keating, International Institute for Applied Systems Analysis

Response to disaster and reorganization in social-ecological systems: the 2010 flood in São Luiz do Paraitinga (Brazil) from a resilience perspective - Juliana Farinaci, University of Campinas

# Off-Site 4 - Crisis, subsistence farming and social fabric (Agde)



Self-subsistence farming, informal and non-profit economy in Eastern European Countries : causes and consequences - A Social Sciences Perspective - Catherine Darrot, Marie-Luce Ghib, Marjorie Jouen, Frédérique Lorenzi

Self-subsistence farming, informal and non-profit economy in Eastern European Countries: causes and consequences - A Social Sciences Perspective - Catherine Darrot, AGROCAMPUS OUEST -Marie-Luce Ghib, ruralest - Marjorie Jouen, Notre Europe -Frédérique Lorenzi, ruralest

A social-ecological case study in Central Romania - Joern Fischer, Leuphana University Lüneburg

How informal institutions add resilience to rural SESs of Alaska and Kenya? - Shauna Burnsilver, School of Human Evolution and Social Change, Center for the Study of Institutional Diversity, School of SustainabilityArizona State University

How to escape the trap? A systems approach to foster rural development in Central Romania - Friederike Mikulcak, Leuphana University Lueneburg

Resilience of Smallholder Farms in the Brazilian Cerrado: An Interdisciplinary and Participatory Assessment Framework -Jennifer Blesh, University of Michigan

The collective debate: evaluating resilient social-ecological patterns of the agriculture sector in northern Tajikistan - Corrie Hannah, Nicholas School of the Environment, Duke University

# Off-Site 5 - Agriculture and Climate (Murviel-lès-Montpellier)



Dialogue on Climate-resilient Farming Practices, Agroecology and Food Sovereignty - Jean-Marc Touzard, Rachel Bezner Kerr

Dialogue on Climate-resilient Farming Practices, Agroecology and Food Sovereignty - Rachel Bezner Kerr, Cornell University

Dialogue on Climate-resilient Farming Practices, Agroecology and Food Sovereignty - Hanson Nyantakyi-Frimpong, Western University, Canada - Rachel Bezner Kerr, Cornell University

How do foreign direct investments in agriculture influence the vulnerability and adaptive capacity to climate change? Empirical evidence from Northern Ghana - Marcus Kaplan, German Development Institute / Deutsches Institut für Entwicklungspolitik

Improving climate risk management to foster food security: Insights from a typology of smallholders' vulnerability in the Peruvian Andes - Diana Sietz, Wageningen University

Linkages between rural livelihood, adaptive capacity and agricultural adaptation strategies to climate change: a synthesis of lessons from Cameroon and Uganda - Henny Osbahr, University of Reading

Mesoamerican tropical agriculture and climate change adaptation: evaluating the resilience of coffee cooperatives in south-eastern Mexico - Antoine Libert Amico, Universidad Autonoma Metropolitana - Unidad Xochimilco

Participatory Research on Climate Change Adaptation for HIV affected and Food Insecure households in Malawi - Laifolo Dakishoni, SFHC Project, Ekwendeni Hospital - Rachel Bezner Kerr, Cornell University

Smallholder Farmers' Resiliency and Rural-Institutional Responses to Climate Change in Peatland Areas of Indonesia -Arya Hadi Dharmawan, Center for Agricultural and Rural Development Studies - Bogor Agricultural University - IPB (Indonesia)

Whose resilience matters? Lessons learned from irrigation development projects in Malawi - Canford Chiroro, University of Sussex

# Off-Site 6 - Agriculture and Water (PNR Camargue)



Water, food and social-ecological resilience - Sylvestre Delmotte, Christo Fabricius

Water, food and social-ecological resilience - Christo Fabricius, Sustainability Research Unit, Nelson Mandela Metropolitan University

Beyond tradition and modernity: the resilience of a farmer managed irrigation system in transition to drip irrigation - Saskia van der Kooij, Wageningen University and Research

Efficiency of water use: a win-win solution? Strengthening resilience in water resources management - Aurélien Dumont, Observatorio del Agua, Faculty of Geology, Universidad Complutense de Madrid

Needs for institutional transformations for managing freshwater and agriculture in South of Cordoba (Argentina) - Monica B. Wehbe, Natinoal University of Rio Cuarto, Argentina

Participatory design of the spatial distribution of cropping systems to limit the risk of water crises - Clément Murgue, Agrosystèmes et développement territorial

**Towards context sensitive theory: Applying a theoretical model of norm-driven cooperation to irrigation in Bali** - Nanda Wijermans, Stockholm Resilience Centre, Stockholm University

Trade-offs and synergies in changing farming systems: a methodological framework at the frontier between socialtechnical and social-ecological systems - Jean-Marc Barbier, INRA

Water, food and social-ecological resilience: Biofuels in Ethiopia -Who wins and who loses? - Jennifer Hodbod, Arizona State University

Water, food and social-ecological resilience: Means and Extremes - The Conjuncture of Food Security, Drought and Public Investments in NE Brazil - Don Nelson, University of Georgia

## Off-Site 7 - Pastoralism (Le Caylar)



Vulnerability and Resilience of Livestock Farming Systems Facing Global Changes - Jean-François Tourrand

Vulnerability and Resilience of Livestock Farming Systems Facing Global Changes - Jean F. Tourrand, Shikui Dong, Mona ABD EL Zaher, Liz Wedderburn, Valéria Homem, Maureen Woodrow

A social-ecological network approach of landscape management: Transhumant pastoralism in the Andean Mountains of North Patagonia, Argentina - Marcos Easdale, Instituto Nacional de Tecnología Agropecuaria

Adopting a resilience lens to analyze adaptation to climate change on alpine pastures - Baptiste Nettier, Développement des territoires montagnards, UMR Herbivores équipe Sybel

Linking the social and the ecological for resilience and adaptability: The case of a controlled grazing system in the Ethiopian highlands - Lemlem Aregu Behailu, Centre for Development Research (CDR), University of Natural Resources and Life Science, Vienna, Austria

Managing the resilience of a livestock-production socioecological system in South Africa - A SES modeling approach -Sebastian Rasch, Institute for Food and Resource Economics - Bonn University

Overcoming Winter Mortalities and Poverty in Mongolian Pastoral Systems: Which Framework for the Definition of Resilience-Based Strategies? - Frédéric Joly, Agroparistech, Association pour le cheval de Przewalski: TAKH

**To what extent can droughts drive transformations of pastoral households?** - Romina Martin, Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Stockholm Resilience Centre, Stockholm University

Transforming Pastoralism in the Horn of Africa - Waiswa Jacob, Department of Religion and Peace Studies

#### Off-Site 8 - Agroforestry and Ecosystem Services (Domaine de Restinclières)



Transformative adaptation in a changing world - Houria Djoudi, Denis Gautier

**Transformative adaptation in a changing world** - Houria Djoudi, Center for International Forestry Research - Denis Gautier, Centre de Coopération Internationale en Recherche Agronomique pour le Développement

Assessing the resilience of agroforestry systems in Central America: what do we learn about the transformability of coffee plantations? - Abigail Fallot, Centre de Coopération Internationale en Recherche Agronomique pour le Développement, Centro Agronomico Tropical de Investigacion y Ensenanza

Can experiences of forest co-management facilitate transformational adaptation in the face of global changes? A case study in Burkina Faso - Djoudi Houria, Center for International Forestry Research

Compromising ecological resilience for sustaining social resilience: Local regulation of spontaneous afforestation in the forest-savannah boundaries of Central Cameroon - Edmond Dounias, Centre d'écologie fonctionnelle et évolutive

Transformational Adaptation in Indigenous Communities : A framework to support positive responses to extreme or rapid environmental change - Claudia Comberti, Environmental Change Institute, University of Oxford

**Transition towards co-ownership in forest management : Bosland (Flanders, Belgium) as a frontrunner** - Pieter Vangansbeke, The Flemish Institute for Technological Research, The Forest and Nature Laboratory, Ghent University



Problem-oriented approaches to the study of social-ecological systems - Graham Epstein

**Problem-oriented approaches to the study of social-ecological systems** - Graham Epstein, Ostrom Workshop in Political Theory and Policy Analysis

Beyond Payments : Voluntary Forest Conservation by Small Farmers in Mexico - Claudia Rodriguez, Dartmouth College

**Does Establishing Property Rights Protect Forests from Roving Bandits?** - Michael Cox, Dartmouth College

Managing forest commons : government and community provision of public goods - Sergio Villamayor-Tomas, Humboldt University

Simplifying the 'complex' : Misunderstood resilience and pseudo transformations in forest and coastal social-ecological systems -Prateep Nayak, Environmental Change and Governance Group -University of Waterloo

**Trust, legitimacy and rule compliance in forest commons** -Graham Epstein, Ostrom Workshop in Political Theory and Policy Analysis, School of Public and Environmental Affairs



How to quantify changes in vulnerability and resilience of agroecosystems resulting from sustainable intensification? - Fabrice DeClerck

How to quantify changes in vulnerability and resilience of agroecosystems resulting from sustainable intensification? - Edmundo Barrios, World Agroforestry Centre

Designing a payment system for ecosystem services by taking into account social, economic, and ecological trade-offs : a wetlands' case study of Veracruz, Mexico - César Vázquez, Instituto de Ecología, A.C. Ecosystem services' tradeoffs and management guidelines for a resilient industrial agriculture in the Colombian Upland Savanna Ecosystems - Germán Andrade, Professor, Universidad de los Andes, Facultad de Administración

Edges between agriculture and forest viewed as interfaces between social and ecological systems - Marc Deconchat, INRA

How do diverse governance systems deal with synergies and trade-offs among ecosystem services on one hand, and stakeholders' desires on the other? - Sherman Farhad, Universidad Pablo de Olavide

Mapping ecosystem services for assessing the resilience of agroecosystems in the North China Plain - Zhihui Li, Center for Chinese Agricultural Policy, Chinese Academy of Sciences, Beijing, China, Institute of Geographic Sciences and Natural Resource Research, University of Chinese Academy of Sciences, Beijing, China

PES promotes land sparing? A comparative analysis of Chiapas and Yucatan, Mexico - Céline Dutilly, CIRAD

Quantification of vulnerability and resilience of agro-ecosystems by exploratory systems modeling - Jeroen Groot, Wageningen University, Farming Systems Ecology Group

The distribution of ecosystem services in Southern Transylvania: equity implications - Andra Milcu, Leuphana Universitaet, Lueneburg

Unpacking poverty in agricultural communities in Costa Rica based on ecosystem management priorities - Marta Berbes-Blazquez, York University, Faculty of Environmental Studies, Instituto Regional de Estudios en Sustancias Toxicas

# Off-Site 9 - Agrobiodiversity (Domaine de Restinclières)

SESSION 🔝 🔛 🗊

Spare Me, Share Me – the role of institutions in ensuring biodiversity's benefits to resilience in agricultural landscape - Didier Bazile, Fabrice DeClerck, Selim Louafi

Spare Me, Share Me – the role of institutions in ensuring biodiversity's benefits to resilience in agricultural landscape -Fabrice DeClerck, Bioversity International - Selim Louafi, Centre de Coopération Internationale en Recherche Agronomique pour le Développement - Unai Pascual, Basque Centre for Climate Change (BC3)

Land sharing vs. land sparing for biodiversity: How agricultural markets make the difference - Marion Desquilbet, Toulouse School of Economics, GREMAQ, INRA

Socio-ecological shifts in agricultural landscapes: Farmland abandonment as a driver of threats and opportunities for biodiversity and ecosystem services - Cibele Queiroz, Stockholm Resilience Centre



From Framework to Farm work: Linking Resilience in Theory and Practice - Gine Zwart, Sarah Doornbos, Willy Douma

From Framework to Farm work: Linking Resilience in Theory and Practice - Gine Zwart, OxfamNovib

Local Change for Global Transformation - Sarah Doornbos, OxfamNovib-Hivos

Scaling up good practice for resilient farming systems - Dr G. V. Ramanjaneyulu, CSA India

Strengthening agricultural biodiversity for smallholder livelihoods - What knowledge is needed to overcome constraints and release potentials? - Sara Elfstrand, The Resilience and Development Programme (SwedBio), Stockholm Resilience Centre, Stockholm University

### Off-Site 10 - Resilience and Conservation (Centre du Scamandre - Vauvert)



Integrating resilience into conservation science and practice - Duan Biggs

Integrating resilience into conservation science and practice -Duan Biggs, Centre of Excellence for Environmental Decisions, University of Queensland

**Applying resilience thinking to large-scale conservation** - Angela Guerrero, The University of Queensland, Centre of excellence for Environmental Decisions

Building resilience into biodiversity offset design and implementation - Fabien Quétier, Biotope - Joseph Bull, Imperial College London

Resilience and conservation – promises and challenges from conservation science and practice - Duan Biggs, Centre of Excellence for Environmental Decisions, University of Queensland

Social resilience in the Great Barrier Reef - Nadine Marshall, CSIRO, Ecosystem Sciences

The importance of wetland conservation in rural landscapes: a case study from a South African Natural World Heritage Site - Dominic Henry, Percy FitzPatrick Institute of African Ornithology

Understanding characteristics that define the feasibility of conservation actions in a common pool marine resource governance system - Morena Mills, University of Queensland



Participatory conservation - Christophe Le Page

Interactive agent-based simulation to chart the winding way from sensitization towards action. A case study on bushmeat hunting in the periphery of Korup National Park, Southwest Province of Cameroon - Christophe Le Page, Centre de Coopération Internationale en Recherche Agronomique pour le Développement

A participatory approach for adapted land use planning in the Sudanese Savannah Zone within the WASCAL-Initiative - Janina Kleemann, Center for Development Research

Combining local and scientific knowledge in land-use planning of villages neighboring Cordillera Azul National Park, Peru - Lily Rodriguez, Centro de conservacion, investigacion y manejo de areas naturales

Modelling ecosystem services to support conservation of seagrass meadows - Johanna Ballé-Béganton, Unité Mixte de Recherche - Centre de droit et d'économie de la mer

Participatory modeling of Protected Area Social-Ecological Systems with managers - Rebecca Laws, University of Queensland

Participatory science as a tool for engagement in the comanagement of natural resources: Understanding how different ways of knowing can translate into better ways of doing in Madidi National Park, Bolivia - Anne Toomey, Lancaster Environment Centre



Thinking protected areas as social-ecological systems - Raphael Mathevet

Capturing insights and complexities: Consilience as the approach for scientific inquiry and conservation planning - Jayshree Vencatesan, Care Earth Trust

Conserving that which we have created - managing for urban living in the North Bull Island UNESCO Biosphere Reserve -Maryan Harris, University College Dublin - School of Biology an Environmental Science - Tamara Hochstrasser, University College Dublin

Differentiated vulnerabilities and adaptive responses to climatic, economic and institutional stressors in Mexico's Calakmul Biosphere Reserve - Diana Calvo-Boyero, Universitat Autònoma de Barcelona - Institut de Ciència i Tecnologia Ambientals Promoting Change by Strengthening a National Community of Practice : Experiences of a Partnership with Canadian Biosphere Reserves - Maureen Reed, School of Environment and Sustainability, University of Saskatchewan - Hélène Godmaire, School of Environment and Sustainability, University of Saskatchewan

Social diversity for ecosystem management in La Palma Biosphere Reserve, Canary Islands : Perspectives, knowledge and management practices among local stewards in the near-shore marine ecosystem - Laia d'Armengol, Stockholm Resilience Centre

Spatial influences on the economic viability of South African National Parks - Alta De Vos, University of Cape Town

#### Off-Site 11 - Green and Blue Urban Resilience (Montpellier)



**Green and Blue Urban Resilience - Luc Doumenc** 

Green and Blue Urban Resilience - Luc Doumenc

Berlin's intercultural gardens: Urban landscapes of socialecological memory - Irene Håkansson, Stockholm Resilience Centre

**Design for urban places of reconnection with the biosphere** -Matteo Giusti, Stockholm Resilience Centre

Enhancing resilience and quality of life through the ecosystem services provided by urban community gardens. Case study of the municipality of Madrid, Spain - Irene Iniesta-Arandia, Universidad Autonoma de Madrid [Madrid]

Equitable urban ecologies: a study of contemporary Cape Town -Pippin Anderson, African Centre for Cities, University of Cape Town

Incorporating Indicators of the Resilience of Water Bodies in an Urban Development Decision Support System - Jonathan Moores, National Institute of Water and Atmospheric Research Ltd

Managing resistance and resilience of urban green space -Tamara Hochstrasser, University College Dublin - School of Biology and Environmental Science - Maryann Harris, University College Dublin - School of Biology and Environmental Science - Karen Foley, School of Architecture

People's Perception of Natural Resources - Understanding Urban Ecological Resilience of Surface Watercourses in Medellín, Colombia - Luisa Fernanda Roldan Rojas, Institut of Regional Science, Karlsruhe Institute of Technology

The role of Spatial Experiences of Urban Nature in Re-connecting with the Biosphere - Stephan Barthel, Stockholm Resilience Centre, Stockholm Univresity

### Off-Site 12 - Socio-Ecological Urban Resilience (Montpellier)



#### Towards a Socio-Ecological Urban Resilience - Anne Sistel

Towards a Socio-Ecological Urban Resilience - Anne Sistel, National School of Architecture of Montpellier, LIFAM Laboratory

A vision of social ecology to access the urban resilience. Resilience and society - Martha Beatríz Díaz Guzmán, RED ECOSOCIAL

Making sense of the Holling Heuristic in urban environments: collective actions and cross scales influences in the transformation of Vallcarca neighborhood (Barcelona) - Rafael Balanzo-Joue, Work Research Programme, Actions Without Borders, International Union of Architects, Research Institute for Sustainability Science and Technology, Polythecnic University of Catalonia, Barcelona Tech - Lorenzo Chelleri, Autonomous Barcelona University, BIARI Alumni, BROWN University

Patrick Geddes as Social Ecologist: a lineage of resilience thinking in regional and urban planning - Philip Crowe, University College Dublin

#### Putting poverty at the heart of urban climate resilience:

**reflections from Asia** - Richard Friend, Institute for Social and Environmental Transition - Marcus Moench, Institute for Social and Environmental Transition - Shiraz Wajih, Gorakhpur Environmental Action Group - Khanin Hutanuwatr, King Mongkut Institute for Technology - Lat Krabang

Spaces and barriers to operationalize urban resilience - Lorenzo Chelleri, Autonomous Barcelona University

Urban resilience thinking and planning ethics - Sonja Deppisch, HafenCity University Hamburg

# Off-Site 13 - The resilience of business (IBM Montpellier)



Resilience of business - Gail Whiteman, Sarah Cornell, Maria Mendiluce

Exploring the Role of Business within Social-Ecological System Change: The World Business Council for Sustainable Development's Engagement with Planetary Boundaries and Action2020 - Gail Whiteman, Rotterdam School of Management, Erasmus University



Resilience of business - Margot Hill Clarvis, Gail Whiteman, Michael Schoon

**Investing in Resilience: Challenges and Opportunities** - Margot Hill Clarvis, University of Geneva & Earth Security Initiative

#### Off-Site 14 - Territoire, sense of place and socio-ecological dynamics (Candillargues)



Sense of place in socio-ecological dynamics - Olivier Barreteau, Francesco Ricci, Stephane Ghiotti

Sense of place in socio-ecological dynamics - Olivier Barreteau, Institut de Recherche en Sciences et Technologies de l'Environnement et de l'Agriculture

**Emergence in territorial ecology: territorial adaptation through social-ecological interactions** - Juliette Cerceau, Laboratoire de Génie de l'Environnement Industriel

Perceptions of high resilience to climate change in northern Norway: Consequences for community adaptation? - Grete Hovelsrud, Nordland Research Institute and Centre for International Climate and Environmental Research-Oslo

Perfume, aromatic and medicinal plants companies in the Drôme valley: examples of territorial resilience in the agro-industrial sector - Marie-Laure prevost, UMR INNOVATION - Montpellier SUPAGRO / CERMOSEM-UJF Grenoble

**Renewable Energy policy implementation in Spain from a territorial perspective** - Richard Hewitt, Veronica Hernandez Jimenez

Sense of place and resilience in marginal populations of the highlands of Peru - Helen Adams, University of Exeter

The role of sense of place and identity in the interdependence of small-scale agriculture and labour migration - Vanessa Masterson, Stockholm Resilience Centre, Stockholm University

#### Tuesday, May 6, 08:30 - 10:00

PLENARY SESSION - PASTEUR - MAHBOUB MAALIM (IGAD), MODERATOR

What is progress in resilience science? - Luca Allinovi, FAO Somalia-Neil Adger, Univerity of Exeter, UK

#### Tuesday, May 6, 10:20 - 11:20

SESSION 1 - ANTIGONE 1

Measuring resilience - Food Security Information Network (FSIN) -Alexis Hoskins

Measuring resilience - Food Security Information Network (FSIN) - Alexis Hoskins

A mixed methods approach to measuring resilience in Somalia -Eugenie Reidy, United Nations International Children's Emergency Fund - Angie Lee, World Food Programme - Luca Alinovi, Marco d'Errico, Food and Agriculture Organization of the UN

Resilience measurement for food and nutrition security: toward an agenda for harmonized methods and tools and overview of Resilience Measurement Design Principles for Food and Nutrition Security - Joyce Luma, World Food Programme - Luca Russo, Food and Agriculture Organization of the UN

Towards a quantifiable measure of resilience - Christophe Bene, Institute of Development Studies

SESSION 2 - ANTIGONE 3 👔

Collaborative Resilience in Practice I: Capacity Building - Bruce Goldstein

**Collaborative Resilience in Practice I: Capacity Building** - Bruce Goldstein, University of Colorado Boulder (USA) - Gregg Walker, Oregon State - Sanda Kaufman, Cleveland State University -Alexandre Olival, Instituto Ouro Verde

**Beyond Boom and Bust: Improving Community Resilience in Rural Ghana** - Gregg Walker, Oregon State University

**Capacity building for collaborative resilience** - Bruce Goldstein, University of Colorado Boulder (USA) - Sanda Kaufman, Cleveland State University

**Evaluation of Resilience as a Tool for Strategic Planning of a Community Development NGO in the Brazilian Amazon** -Alexandre Olival, Instituto Ouro Verde

Scenario Mapping: Collaborating for Transformation in North America and Indonesia - Gregory Hill, University of Portland, Institute for Culture and Ecology

SESSION 3 - BARTHEZ

Students' perspectives on sustainability science research - are we moving towards un-disciplinarity? - Jonas Hentati-Sundberg

Students' perspectives on sustainability science research - are we moving towards un-disciplinarity? - Jonas Hentati-Sundberg, Stockholm University

SESSION 4 - RONDELET

Critical Perspectives on 'Knowledge for Adaptation': The LKCCAP Project in the Kilimanjaro Region, Tanzania - Thomas Smucker

Critical Perspectives on 'Knowledge for Adaptation': The LKCCAP Project in the Kilimanjaro Region, Tanzania - Thomas Smucker, Elizabeth Wangui, Department of Geography, Ohio University -Jennifer Olson, Michigan State University

Bottom-Up Climate Science in the Kilimanjaro Region of Tanzania Jennifer Olson, Michigan State University

Gender, local knowledge and adaptive strategies: Illustrations from Mwanga District, Tanzania - Elizabeth Wangui, Department of Geography, Ohio University

Linking Local Knowledge and Adaptive Capacity in the Kilimanjaro Region - Thomas Smucker, Department of Geography, Ohio University

#### Tuesday, May 6, 11:30 - 12:30

SESSION 5 - ANTIGONE 1

Advancing the measurement of resilience to food insecurity - Marco d'Errico

Advancing the measurement of resilience to food insecurity -Marco d'Errico, FAO

From complexity to more timely and relevant food security intervention: Novel methods and their utility in the food and nutrition security assessment and information systems - Nathan Morrow, Tulane University

How Climate Change can influence household resilience to food security - Marco d'Errico, Solomon Asfaw, Greta Semplici, Food and Agriculture Organization of the UN

How Will We Know? Advancing the measurement of resilience to food insecurity - Jon Kurtz, Mercy Corps

Resilience perspective on food security mechanisms: Exploring cross-scale interactions and tradeoffs in India's new National Food Security Bill - Rimjhim Aggarwal, School of Sustainability, Arizona State University - Katherine Spielmann, School of Human Evolution and Social Change, Arizona State University

#### SESSION 6 - ANTIGONE 3

#### **Collaborative resilience 2 - Bruce Goldstein**

**Collaborative Resilience in Practice II: Social Learning** - Bruce Goldstein, University of Colorado Boulder (USA) - Ray Ison, The Open University - David Burchfield, University of Colorado Boulder (USA) - Daniel Murphy, University of Cincinnati - Tom James, University of Exeter, Environment and Sustainability Institute -Katrina Brown, University of Exeter, Environment and Sustainability Institute

Adaptive Assessment: Models and Methods for Collaborative Resilience Assessment - David Burchfield, Bruce Goldstein, University of Colorado Boulder (USA)

Engaging Future Vulnerability and Adaptation Using Landscapescale Iterative Scenario-Building - Daniel Murphy, University of Cincinnati

Recognising social-ecological feedbacks: Co-creating a learning history of the dynamics of social-ecological innovations - Tom James, Katrina Brown, University of Exeter, Environment and Sustainability Institute

Towards systemic governance of social-biophysical systems: social learning as collaborative performance - Ray Ison, Professor of Systems

SESSION 7 - BARTHEZ

Resilience and Interdisciplinary Research - Dominique Hervé, Claude Millier

Resilience and Interdisciplinary research - Dominique Hervé, Institut de Recherche pour le Développement

A model for interdisciplinary research on socio-ecological change Lucas Rutting, Institute for Interdisciplinary Studies

**Resilience and unity: some philosophical remarks on methodological unification** - Henrik Thorén, Department of Theoretical Philosophy, Lund University Centre of Excellence for Integration of Social and Natural Dimensions of Sustainability

Transdisciplinary learning for institutional transformation: who to learn with, what to learn about and how to learn - Dirk Roux, South African National Parks



Traditional knowledge and resilience thinking - Juliana Merçon, Evodia Silva-Rivera

Traditional knowledge and resilience thinking - Juliana Merçon, University of Veracruz

Cultural and biological heritage resilience through a grassroots Diversified Agroforestry Systems approach - Evodia Silva Rivera, Center for Tropical Research - Universidad Veracruzana Indigenous wisdom and the science of resilience.

Complementarities between the Andean 'living well' (buen vivir) paradigm and resilience thinking - Juliana Merçon, University of Veracruz

**Tracking Change - Traditional Knowledge and Ecosystem** Dynamics in Northern Canada - Brenda Parlee, University of Alberta, Canada

With Our Own Hands: A celebration of life and food in the Afghan and Tajik Pamirs - Jamila Haider, Stockholm Resilience Centre



**Resilience, Community Action and Social Transformation - Thomas** Henfrey, Glen Kuecker, Gesa Maschkowski

Resilience, Community Action and Social Transformation -Thomas Henfrey, Schumacher Institute for Sustainable Systems -Glen Kuecker, DePauw University - Gesa Maschkowski, Institute for Food and Resource Economics - Juan del Río, Transition Research Network, Red de Transición España - Kitty de Bruin, Transition in France

Personal Resilience, Transition and Behaviour Change: a Salutogenetic Approach - Gesa Maschkowski, Institute for Food and Resource Economics

**Resilience, Transition, and Knowledge : Global South Perspectives** - Glen Kuecker, DePauw University

Transitioning to resilient local communities in the context of economic crisis : barriers and opportunities from the Spanish Transition Movement - Juan del Río, Transition Research Network, Red de Transición España

#### SESSION 10 - SULLY 2

Identifying Regional Scale Social Ecological Feedbacks for Adaptive Governance Practice - Michael Quinn, Mary-Ellen Tyler

Identifying Regional Scale Social Ecological Feedbacks for Adaptive Governance Practice - Michael Quinn, Institute for Environmental Sustainability, Mount Royal University - Mary-Ellen Tyler, Faculty of Environmental Design, University of Calgary

Harnessing regional and local food procurement to build resilient smallholder agricultural systems - Sharon Amani, School of Sustainability

Institutional Logics and Social Regimes: A resilience history of social and ecological change in the Columbia River Basin -Gregory Hill, Institute for Culture and Ecology, University of Portland

The use of a regional space as "theater" - integration of anayltical means for resilience understanding in order to highlight long term societal transformations - Uno Svedin, Stockholm University - Garry Peterson, Stockholm Resilience Centre - Hans Liljenström, Swedish University of Agricultural Sciences

SESSION 11 - SULLY 3

#### **Perceptions of change - Raphael Mathevet**

Global Crisis & Multiple Players: Convergence or Divergence on the Way to Reach Resiliency? - Jean-Fabrice Lebraty, Laboratoire MAGELLAN

On Floods and Droughts: Comparing family farmers' perceptions of climate change in three Brazilian biomes - the Amazon, Caatinga and Cerrado - Diego Lindoso, Stéphanie Nasuti, Centro de Desenvolvimento Sustentável - Flávio Eiró, Equipe de recherches sur les inégalités sociales (ERIS)/Equipe CMH, Centro de Desenvolvimento Sustentável

Perceptions on trade-offs between development outcomes along the Okavango river - Thomas Falk, University of Marburg



Participation and scale: stories of resilience and development in rural systems - Laura Schmitt Olabisi

Participation and scale: stories of resilience and development in rural systems - Laura Schmitt Olabisi, Robert Richardson, John Kerr, Department of Community Sustainability, Michigan State University

Environmental services contract auctions: efficient, fair, transparent, and pro-poor? - John Kerr, Department of Community Sustainability, Michigan State University

Organic agriculture as a resilience strategy - Laura Schmitt Olabisi, Department of Community Sustainability, Michigan State University

Participatory frameworks for enhancing rural food security and community resilience - Robert Richardson, Department of Community Sustainability, Michigan State University

Storytelling, global change and social-ecological systems resilience. From the 'integration of knowledge forms' to the 'mobilisation of knowledge actors' - J. David Tabara, Global Climate Forum, Institute of Environmental Science and Technology, Universitat Autònoma de Barcelona - Maria Heras, Institute of Environmental Science and Technology, Universitat Autònoma de Barcelona



Disturbance, Crisis, and Creative Construction - Timothy Baird, **David Wrathall** 

Disturbance, Crisis, and Creative Construction - Timothy Baird, Virginia Tech [Blacksburg]

How conservation creates disturbance feedbacks by promoting social and economic diversity across scales - Timothy Baird, Virginia Tech [Blacksburg]

**Rebuilding Windows of Opportunity: Adaptive governance and** creative disturbance in the Klamath Basin, USA - Brian Chaffin, **Oregon State University** 

Regime shift for whom but to what ends?: Narco-trafficking as a disturbance catalysing indigenous claims to land in Honduras -David Wrathall, United Nations University - Institute for **Environment and Human Security** 

Resilient responses to disturbance in island social-ecological systems: facilitating factors from across the tropics - Eleanor Sterling, Center for Biodiversity and Conservation, American Museum of Natural History

SESSION 14 - JOFFRE B



Social-ecological resilience indicators: a participatory tool to measure landscape resilience - Nadia Bergamini, Dunja Mijatovic, **Pablo Eyzaguirre** 

Social-ecological resilience indicators: a participatory tool to measure landscape resilience - Pablo Eyzaguirre, Bioversity International

A decision support tool for analysis of the aesthetic value of regional landscapes in Quebec, Canada - Alison Munson, Centre d'Etude de la Forêt, Université Laval

Characterising agroecosystem resilience using an indicatorsbased approach - Nicholas Cradock-Henry, Landcare Research

Incorporating Indicators of the Resilience of Water Bodies in an Urban Development Decision Support System - Jonathan Moores, National Institute of Water and Atmospheric Research Ltd



Using Fuzzy Logic Cognitive Mapping as a participatory approach to understand structure, dynamics and change in social-ecological systems - Steven Gray, Stefan Gray, Barry O'Dwyer

Using Fuzzy Logic Cognitive Mapping as a participatory approach to understand structure, dynamics and change in socialecological systems - Steven Gray, University of Massachusetts Boston

Fuzzy Cognitive Mapping as tool for scenario development. Conceptual added values and practical pitfalls - Kasper Kok, Wageningen University, Soil Geography and Landscape group

Integrating knowledge on climate change adaptation at the local scale by using Fuzzy-logic Cognitive Mapping as a tool to explore resilience and cope with uncertainty - Stefan Gray, Coastal and Marine Research Centre, Environmental Research Institute, University College Cork

Mental Modeler: Incorporating stakeholder knowledge into natural resource decision-making through a Fuzzy-logic Cognitive Mapping (FCM) software tool - Steven Gray, University of Massachusetts Boston

Using Fuzzy-logic Cognitive Mapping to combine knowledge domains and scales via a web-based climate information platform: the opportunities and challenges of integrating hard scientific data with soft systems models - O'Dwyer Barry, Coastal & Marine Reserach Centre, Environmental Research Institute, University College Cork

#### SESSION 16 - JOFFRE D



Building a foundation for managing for tipping points in marine ecosystems - Carrie Kappel, Courtney Scarborough, Mary Hunsicker, Adrian Stier

**Building a foundation for managing for tipping points in marine ecosystems** - Courtney Scarborough, Mary Hunsicker, National Center for Ecological Analysis and Synthesis

A global review of marine ecosystem regime shifts - Courtney Scarborough, National Center for Ecological Analysis and Synthesis - Carrie Kappel, National Center for Ecological Analysis and Synthesis

Characterizing non-linear relationships in marine ecosystems for improved ocean management - Mary Hunsicker, University of California Santa Barbara, National Center for Ecological Analysis and Synthesis





Ecosystems services and sustainable intensification: Trade-offs analysis with biophysical and participatory modeling approaches -Fred Kizito, Christophe Le Page, Leigh Winowiecki

Ecosystems services and sustainable intensification: Trade-offs analysis with biophysical and participatory modeling approaches - Fred Kizito, Christophe Le Page, Leigh Winowiecki

Gaming and simulation to explore collaborative land use decision-making in complex social-ecological systems - Luis García-Barrios, El Colegio de la Frontera Sur - Erika Speelman, Wageningen University

Making existing knowledge explicit on socio-ecological dynamics: complementary inputs from three methods in a watershed territory of the Bolivian Eastern - Abigail Fallot, CIRAD, Centro Agronomico Tropical de Investigacion y Ensenanza - Julio César Salinas, Fundación para la Conservación del Bosque seco Chiquitano

Socio-ecohydrologic services and agents in a bi-national context: resilience of semi-arid riparian systems - Mitchell Pavao-Zuckerman, University of Arizona

The role of interactive agent-based simulation modeling platforms for tradeoff analysis in participatory approaches for integrated water resources management - Christophe Le Page, CIRAD

SESSION 18 - JOFFRE 4

Resilience & Industry - Steve Evans

Dealing with change and sustainability in a global trade network: dynamics and main lessons from port cities areas - Nicolas Mat, Ecole des Mines d'Alès - LGEI

Employing a transition management approach to reorient business strategies for sustainability and resilience: the case of the cycle shops - Leen Gorissen, Flemish Institute for Technological Research How vulnerable and resilient are SMEs to climate change? - Paola Sakai, School of Earth and Enrironment [Leeds], Centre for Climate Change Economics and Policy

Is the UK water sector becoming resilient to climate change? -Paola Sakai, School of Earth and Enrironment [Leeds], Centre for Climate Change Economics and Policy

Reframing adaptive capacity attributes of organizations operating in the water sector - Guido Minucci, Architecture and Urban Studies Department



Systemic Integrated Resilience and Adaptation Planning - Ariella Helfgott, Joost Vervoort, Meghan Bailey

**Systemic Integrated Resilience and Adaptation Planning** - Ariella Helfgott, Joost Vervoort, Meghan Bailey, Abrar Chaudhury, Chase Sova, Jessica Thorn, Environmental Change Institute, University of Oxford (UK)

Adaptable scope: scenarios to guide diverse decision pathways in multi-level, multi-actor social-ecological systems - Joost Vervoort, University of Oxford (UK)

Surfacing World Views: methods to uncover common elements of worldview to aid climate adaptation decision-making and planning - Bailey Meghan, University of Oxford (UK)

Systemic Integrated Resilience and Adaptation Planning frameworks and case studies - Ariella Helfgott, Environmental Change Institute, University of Oxford (UK)

Systemic Integrated Resilience and Adaptation Planning: Institutional and Organizational Dimensions -Abrar Chaudhury, University of Oxford - Chase Sova, University of Oxford



#### Resilience at the margin 1 - Gary Kofinas

**Resilience at the Margin** - Gary Kofinas, Dept of Humans & Environment and Institute of Arctic Biology University of Alaska Fairbanks

Breaking points at the margin: Community mobilization and the continued failure of co-management of protected areas in South Africa - Georgina Cundill, Rhodes University

Facilitating Local Transformation: Boundary-spanning collaborations to facilitate community-led adaptations for selfreliance and sustainability in Alaska - F Stuart Chapin III, University of Alaska Fairbanks

Food Security in the Canadian North - Fikret Berkes, University of Manitoba

How informal institutions add resilience to rural SESs of Alaska and Kenya? - Shauna BurnSilver, School of Human Evolution and Social Change, Center for the Study of Institutional Diversity, School of Sustainability, Arizona State University

Sense of place and resilience in marginal populations of the highlands of Peru - Helen Adams, University of Exeter

Transformations in marginal social-ecological systems in the southwest coastal zone of Bangladesh - Neil Adger, University of Exeter

#### SESSION 21 - JOFFRE 1-3

Forest governance and trajectories - Claude Garcia, Chris Kettle, Hélène Dessard

Adaptive governance in the Brazilian Amazon: a case study of the Green Municipality of Paragominas - Cecilia Viana, Universidade de Brasília

Dynamic diagnosing of subtropical forest ecosystem resilience after disturbed by the snow frozen disaster - Fei Yang, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences

Tree speecies diversity along a gradient of agricultural landscapes in a Neotropical rainforest region: balances between conservation and production - Miguel Martinez-Ramos, Centro de investigaciones en Ecosistemas, universidad National Autonoma de Mexico

#### SESSION 22 - JOFFRE 1-4

Principles for Building Resilience in Social-Ecological Systems: Sustaining ecosystem services in a turbulent world - Reinette (Oonsie) Biggs, Maja Schlueter, Michael Schoon

Principles for Building Resilience in Social-Ecological Systems: Sustaining ecosystem services in a turbulent world - Reinette (Oonsie) Biggs, Stockholm University, Stellenbosch University

#### SESSION 23 - JOFFRE 1-5

The Social-ecological systems meta-analysis database (SESMAD) project - Michael Cox

The Social-ecological systems meta-analysis database (SESMAD) project - Michael Cox, Dartmouth College

Diagnosing large-scale marine protected areas: a comparative analysis of the social, ecological and institutional drivers of successful governance - Natalie Ban, University of Victoria -Graham Epstein, University of Indiana

Migratory species, governance, and conservation: a comparative analysis of large-scale social-ecological systems - Michael Schoon, School of Sustainability, Arizona State University

Studying National Forest Policies in a comparative context through the lens of the social-ecological systems meta-analysis database - Forrest Fleischman, Texas A&M University, department of Ecosystem Science & Management

Systematic case study methodology in SES contexts: making within-case comparisons with the Social-ecological systems meta-analysis database - Sergio Villamayor-Tomas, Humboldt University, Division of Resource Economics

The SESMAD project - Michael Cox, Dartmouth College

Transboundary Protected Areas and the Study of Large-Scale Social-Ecological Systems - Michael Schoon, Arizona State University, School of Sustainability

Understanding governance of large freshwater systems: a comparative analysis of environmental governance in national and transnational watersheds - Sergio Villamayor-Tomas, Humboldt University

SESSION 24 - JOFFRE 1-6

Urban resilience and ecosystem services - Stephan Barthel

Ecosystem Services in the New York City Social-ecological System: Multi-criteria analysis, tradeoffs and synergies - Peleg Kremer, The New School Tishman Environment and Design Center

Governance of urban ecosystem services in the global south: A synthesis - Dennis Mailu, University of Reading

Understanding resilience in rapidly urbanising areas - adaptive capacity and ecosystem services in the slums of Kampala, Uganda - James Waters, School of Environmental Sciences

#### Tuesday, May 6, 14:30 - 15:30

#### Free time

**BOOK PRESENTATION - ANTIGONE 3** 

Présentation de livre "Fragilités et résilience: les nouvelles frontières de la mondialisation". Khartala, J.M. Chataignier (ed), Jean-Luc Dubois, Benoît Lallau

#### **FILM - ANTIGONE 1**

"Jimbin Kaboo Yimardoowarra Marninil" – Nyikina (Indigenous Australian) women, from the inside to the outside - Magali Mcduffie, National Centre for Indigenous Studies, Australian National University - Anne Poelina Madjulla Inc

#### Tuesday, May 6, 15:40 - 16:40

SESSION 25 - ANTIGONE 1



Resilience assessment in practice: a dialogue to share insights from case studies and evaluate assessment approaches - Allyson Quinlan, Paul Ryan

Resilience assessment in practice: A dialogue to share insights from case studies and evaluate assessment approaches - Allyson Quinlan, Resilience Alliance - Paul Ryan, Australia Resilience Centre

An application of the resilience assessment framework to preexisting case studies in the Arctic - Allyson Quinlan, Resilience Alliance

From resilience theory to on-ground action: lessons from Australian regions applying resilience to natural resource management - Paul Ryan, Interface NRM

Resilience in Practice for Strategic Planning at Municipal Level -Louise Hard af Segerstad, Albaeco - My Sellberg, Stockholm Resilience Centre

The Namoi Catchment Action Plan: Resilience theory into practice at the Catchment (regional) scale in Australia - Francesca Andreoni, Bel Tempo

Theory to practice: applying a resilience approach to managing natural resources in the Goulburn Broken Catchment, Victoria, Australia - Chris Norman, Goulburn Broken Catchment Management Authority

#### SESSION 26 - ANTIGONE 3



Panel on 'Building resilience to food crises: lessons learned for EU's cooperation policies' - Jean-Pierre Halkin, another speaker (tbc)

SESSION 27 - BARTHEZ

Integral analysis of social-ecological systems: the art of interdisciplinary research - Adriaan Slob, Jurian Edelenbos

Integral analysis of social-ecological systems: the art of interdisciplinary research - Adriaan Slob, TNO



Knowledge for disaster resilience: Exploring memory, governance and resilience in practice - Erin Bohensky, Anne Leitch

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Knowledge for disaster resilience: Exploring memory, governance and resilience in practice - Erin Bohensky, CSIRO Ecosystem Sciences

Disaster risk governance: dimensions, variations and transformations - Emily Wilkinson, Overseas Development Institute

**Framing resilience: practitioners view of its meaning and usefulness in disaster risk management practice** - Paulina Aldunce, Department of Resoure Management and Geography, The University of Melbourne, Department of Environmental Sciences and Natural Resources, University of Chile, Centre for Climate and Resilience Research (CR)2

From disaster risk to disaster resilience of communities: promoting ecosystem-based management and social governance capacity - Jeanne Nel, Council for Scientific and Industrial Research, Council for Scientific and Industrial Research

#### SESSION 29 - SULLY 1

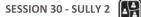
#### Urban resilience & collective action - Rafael Balanzo

Making sense of the Holling Heuristic in urban environments: collective actions and cross scales influences in the transformation of Vallcarca neighborhood (Barcelona) - Rafael Balanzo-Joue, Work Research Programme, Actions Without Borders, International Union of Architects, Research Institute for Sustainability Science and Technology, Polythecnic University of Catalonia, Barcelona Tech - Lorenzo Chelleri, BIARI Alumni, BROWN University, Autonomous Barcelona University

Transformation of urban lake governance in Bangalore, India-a comparison of civic initiatives - Flor Luna, Stockholm Resilience Centre

Urban resilience to climate change and capabilities: for a human development centered approach of adaptation in city contexts -Béatrice Quenault, Université Rennes 2, Espaces et Sociétés

Resilience trade-offs: urban-rural interdependencies in the Southern Bolivian Altiplano - Guido Minucci, Architecture and Urban Studies Department



Mining, environment and society in the Kimberley and Canning Basin, Australia : Implementation of organic thinking to organize a development that increases the resilience of communities living on their territory - Philippe Vaillant

Mining, environment and society in the Kimberley and Canning Basin, Australia: Implementation of organic thinking to organize a development that increases the resilience of communities living on their territory - Philippe Vaillant, Université de Lorraine



#### **Adaptation strategies - Elin Enfors**

Adaptation to climate change and improved livelihood of Zongoene community, xai-xai district, south of Mozambique -Manuel Victor Poio, Centro de Desenvolvimento Sustentavel para as Zonas Costeiras

Climate variability and Vulnerability: Adaptation to extremes climate events and building Climate Resilience - Sunpreet Kaur, InsPIRE Network for Environment

Smallholder Farmers' Resiliency under Rural-Ecological Crises: Livelihood Adapted Strategies in Indonesia - Arya Hadi Dharmawan, Center for Agricultural and Rural Development Studies - Bogor Agricultural University - IPB (INDONESIA)

Social-ecologies of Crisis: Assessing the Back-to-the-Land Movement in Greece - Karina Benessaiah, Arizona State University



Culture and resilience - William's Daré

From Wild meat to chicken nuggets: tradeoffs in nutritional transitions observed in socio ecological systems from the Amazon - Maria Paula Quiceno, Fundacion SI

Knowing country, knowing people: Extreme weather events and community resilience in North Queensland, Australia - Gabriele Weichart, University of Vienna, Department of Social and Cultural Anthropology

La Résilience Baka et Bakola face aux mutations socioenvironnementales (Cameroun) - Nguede Ngono Jean-Pierre, Centre d'Etudes Africaines

Perceptions, power and politics: building communities' resilience to climate change in Vanuatu, South Pacific - Ainka Granderson, Commonwealth Scientific and Industrial Research Organisation, University of Melbourne - School of Land and Environment

Rural Networks, Pathways to History - Richard Hewitt, Veronica Hernandez Jimenez

SESSION 33 - JOFFRE A

#### **Trajectories of resilience - Craig Allen**

Desertification - Development Nexus and the Factors Contributing to Drought Resilience in the Thar Desert Region (India) - Nisha Varghese, Indira Gandhi National Open University

Enhancing the Resilience of Dryland Ecosystem Against Water Droughts and Land degradation in Drylands of Pakistan -Sahibzada Irfanullah Khan, Sustainable Land Management Programme to Combat Desertification

Livestock systems' trajectories over the long term: which adaptations for which resilience? The case of family farms in the Amazon - Nathalie Cialdella, Soraya Carvalho, Laura Fereira, Livia Navegantes Alves, René Poccard-Chapuis, Jean-François Tourrand, CIRAD

Threat to the future of the Inner Niger Delta socio-ecosystem: how to break a rigidity trap? - Pierre Morand, Institut de Recherche pour le Développement - Famory Sinaba, Institut d'Economie Rurale - Amaga Kodio, Institut d'Economie Rurale SESSION 34 - JOFFRE B



Measuring complex changes in complex landscapes - Manuel Boissière, Douglas Sheil

**Measuring complex changes in complex landscapes** - Manuel Boissière, CIRAD, CIFOR - Douglas Sheil, CIFOR, Southern Cross University

Assessing and measuring changes in social and ecological systems with local communities in tropical landscapes: examples from Indonesia - Manuel Boissière, CIRAD, CIFOR - Douglas Sheil, CIFOR, Southern Cross University

Collaborative research in the Arctic: How to address community concerns in a changing environment? - Sylvie Blangy, Centre d'écologie fonctionnelle et évolutive

Similar resilience attributes in lakes with different management practices - Didier Baho, Swedish University of Agricultural Sciences



Disentangling complex patterns in social-ecological systems using Qualitative Comparative Analysis (QCA) - Orjan Bodin, Xavier Basurto

**Disentangling complex patterns in social-ecological systems using Qualitative Comparative Analysis (QCA)** - Orjan Bodin, Stockholm Resilience Centre - Xavier Basurto, Duke university [Durham]

Challenges in using fsQCA to analyse performance characteristics of governance systems - Claudia Pahl-Wostl, Institute of Environmental Systems Research, University of Osnabrück

International fisheries regime effectiveness - analyzing activities and resources of key actors in the Southern Ocean using QCA -Orjan Bodin, Stockholm Resilience Centre

Using fsQCA to study diversity and its effects on emergence and robustness in institutions - Xavier Basurto, Duke university [Durham]



How to enhance agrifood resilience? - Operationalising resilience approaches - Helena Kahiluoto, Karoliina Rimhanen, Miia Kuisma

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How to enhance agrifood resilience? - Operationalising resilience approaches - Karoliina Rimhanen, MTT Agrifood Research Finland -Miia Kuisma, MTT Agrifood Research Finland - Hanna Mäkinen, MTT Agrifood Research Finland - Sami Paavola, University of Helsinki

An empirical assessment method for resilience through diversification - An application in forage plants - Hanna Mäkinen, MTT Agrifood Research Finland

**Determinants of resilience in dairy systems** - Karoliina Rimhanen, MTT Agrifood Research Finland

Enhancing resilience of agrifood systems by nutrient and energy economy - Miia Kuisma, MTT Agrifood Research Finland

Making sense of resilience in barley breeding: Towards usability of the concept of response diversity - Sami Paavola, University of Helsinki



Resilience to drought in Monsoon-dominated semi-arid environments: analysis through computer simulation - Andrea Balbo, Matthieu Salpeteur

Resilience to drought in Monsoon-dominated semi-arid environments: analysis through computer simulation - Andrea Balbo, Complexity and Socio-Ecological Dynamics and SimulPast, Istitució Milà i Fontanals, Consejo Superior de Investigaciones Científicas

Mobile phones for mobile people: The effects of affordable cellular communication technology on the resilience of traditional shepherds in Gujarat, India - Xavier Rubio-Campillo, Barcelona Supercomputing Centre

Modelling Cultural Transmission of Subsistence Strategies in Monsoon dominated semi-arid environments - Enrico Ryunosuke Crema, Institute of Archaeology, UCL Resilience to precipitation variability in tropical semi-arid environments. Agent-based simulation of Holocene population dynamics in Kutch-Saurashtra, Gujarat, India - Andrea Balbo, Istitució Milà i Fontanals, Consejo Superior de Investigaciones Cientificas

#### **SESSION 38 - JOFFRE 4**

#### **Resilience & industry Part 2 - Timothy Smith**

**Diversity and Resilience in Industrial Systems - An Automotive** Case Study - Paul Nieuwenhuis, Cardiff University

Industrial Symbiosis as a sustainable business model: theoretical and empirical findings - Marian Chertow, Yale University, School of Forestry and Environmental Studies

Transitions for Corporate Sustainability - Timothy Smith, University of Minnesota

Where does industry fit into a resilient and sustainable future? -Steve Evans, University of Cambridge



Using scenarios to explore plausible social-ecological futures - Gary Peterson

Developing robust strategies for resilient policies: a combined backcasting and exploratory scenarios methodology - Mathijs van Vliet, Wageningen University, Public Administration and Policy group

**Exploring Future Trajectories to Support Positive Changes in a** Challenging Transformation : Case Study from the Chiquitania Region in Bolivia - Tahia Devisscher, PhD Candidate, University of Oxford / Stockholm Environment Institute, Oxford

Planning for Social-ecological system transformation: Lessons from scenario planning for wildlife management in the SW Yukon - Dylan Beach, School of Environment and Sustainability, University of Saskatchewan

Scenario planning and Futures thinking: a useful tool for community-based management of tradeoffs? - Kerry Waylen, The James Hutton Institute

Using scenarios to explore plausible social-ecological future contexts for the Malaria challenge and its potential solutions -Demian Snel, Climate Change, Agriculture and Food Security

SESSION 40 - JOFFRE 1-2

#### Resilience at the margin 2 - Gary Kofinas

Resilience at the Margin - Gary Kofinas, Dept of Humans & Environment and Institute of Arctic Biology University of Alaska Fairbanks

SESSION 41 - JOFFRE 1-3



Reconnecting culture and agriculture: community forests, ecosystem services and resilience of smallholder agriculture -**Shonil A Bhagwat** 

Reconnecting culture and agriculture: community forests, ecosystem services and resilience of smallholder agriculture -Shonil A Bhagwat, The Open University

Anticipating the onsets of collapse/insecure phases in community livelihoods in a tropical forest margin - Quang Bao Le, Natural and Social Science Interface (NSSI), Institute for Environmental Decisions (IED), ETH Zurich

Forest-based strategies for local communities' resilience to climate variations - Giacomo Fedele, Florie Chazarin, Center for International Forestry Research

Resilience analysis through the lens of contribution of mangrove forest to local livelihoods - examples of Sundarbans in southwest coastal Bangladesh - Bishawjit Mallick, Karlsruhe Institute of Technology

SESSION 42 - JOFFRE 1-4



The Arctic Resilience Report: Progress and Prospects - Douglas Clark, Allyson Quinlan, Olof Olsson

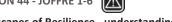
The Arctic Resilience Report: Progress and Prospects - Douglas Clark, School of Environment and Sustainability, University of Saskatchewan - Allyson Quinlan, Resilience Alliance



Managing the Pandora's Box: trade-offs between delivering currently prioritized ecosystem services and the capacity to deliver future services - Jelena Vukomanovic, Patrick Bourgeron, Jacques Baudry, Kinga Krauze

Managing the Pandora's Box: trade-offs between delivering currently prioritized ecosystem services and the capacity to deliver future services - Jelena Vukomanovic, Patrick Bourgeron, Institute of Arctic and Alpine Research, University of Colorado Boulder - Jacques Baudry, INRA SAD-Paysage

SESSION 44 - JOFFRE 1-6



Landscapes of Resilience - understanding how the creation and care of green spaces can affect resilience in times of crisis - Keith Tidball, Erika Svendsen, Traci Sooter

Landscapes of Resilience - understanding how the creation and care of green spaces can affect resilience in times of crisis - Keith Tidball, Dept. of Natural Resources, Cornell University - Erika Svendsen, US Forest Service, Northern Research Station, USA Traci Sooter, Hammons School of Architecture, Drury University

Green space and stewardship in New York City's Post-Sandy Waterfront Communities - Erika Svendsen, USDA Forest Service -NYC Urban Field Station

Greening in the Red Zone: Valuing Open Spaces and Sacred Places in Post-Disaster Contexts - Keith Tidball, Dept. of Natural Resources, Cornell University

Participatory Design in Re-Greening after Natural Disasters for Individual and Community Resilience -Traci Sooter, Drury University

Visual Documentation: Multiple View Points - Victoria Marshall, Colin Macfadyen, TILL

#### Tuesday, May 6, 17:10 - 18:10



Assessing resilience assessment: is the tool applicable to management of social-ecological systems in contested frontier regions? - Robert Buschbacher, Wendy-LinBarthels

Assessing resilience assessment: is the tool applicable to management of social-ecological systems in contested frontier regions? - Robert Buschbacher, University of Florida - Wendy-Lin Bartels, University of Florida

**Developing Resilience Assessment tools for development** practitioners for improved stewardship of social-ecological systems - Sara Elfstrand, The Resilience and Development Programme (SwedBio), Stockholm Resilience Centre, Stockholm University

Resilience Assessment in Tajikistan: cross-scale perspectives -Jamila Haider, Stockholm Resilience Centre

Who counts resilience and whose resilience counts? Applying the RA workbook along the contested Amazonian frontier - Wendy-Lin Bartels, University of Florida - Robert Buschbacher, University of Florida



Sustainable intensification of agriculture for human prosperity and global sustainability - Fabrice DeClerck, Andrew Noble, Johan Rockstrom, Alain Vidal

Sustainable intensification of agriculture for human prosperity and global sustainability - Andrew Noble, CGIAR, Water Land and Ecosystems - Johan Rockstrom, Line Gordon, Elin Enfors, Megan Meacham, Stockholm Resilience Center - Alain Vidal, CGIAR Consortium

#### SESSION 47 - BARTHEZ

#### ARTHEZ

Resilience Thinking in an Urbanizing World - John Marty Anderies, Hallie Eakin, Marco Janssen

Resilience Thinking in an Urbanizing World - J. Marty Anderies, Center for the Study of Institutional Diversity, Arizona State University - Marco Janssen, Center for the Study of Institutional Diversity, Arizona State University - Allain Barnett, CSID ASU -Jacopo Baggio, CSID ASU - Shauna BurnSilver, School of Human Evolution and Social Change ASU - David Manuel-Navarette, School of Sustainability at ASU - Michael Schoon, School of Sustainability at ASU - Sander Van der Leeuw, Complex Adaptive Systems

#### SESSION 48 - RONDELET

Modalities and political dimensions of the knowledge coproduction for the resilience of socio-ecosystems - Frédérique Jankowski, Pascale Moity Maizi

Modalities and political dimensions of the knowledge coproduction for the resilience of socio-ecosystems - Frédérique Jankowski, Gestion des ressources renouvelables et environnement - Pascale Moity Maizi, Montpellier SupAgro -Institut des régions chaudes

Developing resilient, adaptive water management systems through a bottom-up participatory technology development process - A case study in four Indigenous communities in Canada - Khosrow Farahbakhsh, School of Engineering, University of Guelph

Diffusion of agro-ecological knowledges for the socio-ecological resilience in the state of Oaxaca (Mexico). Some political and epistemological dimensions of different knowledges integration -Frédérique Jankowski, Gestion des ressources renouvelables et environnement

Knowledge synergies for the Anthroposcene - A Multiple Evidence Base approach - Maria Tengö, Stockholm Resilience Centre, Stockholm University

Ways of knowing and the production of blended knowledge when managing for resilience - Marcela Brugnach, University of Twente - Helen Ingram, Southwest Center, University of Arizona and School of Social Ecology, University of California Irvine



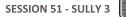
**Resilience & risk financing - Adriana Keating** 

Resilience and Risk Financing - Adriana Keating, IIASA - Linda Freiner, Zurich Insurance - Ian O'Donnell, IFRC



SES and the main nature/society relationships concepts - Xavier Arnauld de Sartre, Bernard Hubert

SES and the main nature/society relationships concepts - Xavier Arnaud de Sartre, Bernard Hubert, Tom Bassett, Mike Schoon, Stephane Ghiotti



Resilience thinking on adaptation to change - Sandra Lavorel

**Experiences Applying the Climate Resilience Framework Linking Theory with Practice** - Marcus Moench, Institute for Social and Environmental Transition

Increasing resilience and adaptation to climate change in fisheries and aquaculture : Methodological advances for vulnerability assessments - Cecile Brugere, Stockholm Environment Institute

**Operationalising the concept of Adaptation Services** - Sandra Lavorel, Laboratoire d'écologie alpine

#### SESSION 52 - JOFFRE 5

#### Deconstructing leadership & social capital - Samantha Jovicic

**Deconstructing leadership : the people and processes driving change** - Louisa Evans, ARC Centre of Excellence for Coral Reef Studies, Exeter University

The role of leadership in navigating change and driving transformation in environmental governance - a case study from Solomon Islands - Philippa Cohen, WorldFish, ARC Centre of Excellence for Coral Reef Studies



Towards an intermediate level of complexity in SES analysis - Maja Schlüter, Orjan Bodin

**Towards an intermediate level of complexity in SES analysis** -Maja Schlüter, Stockholm Resilience Centre - Orjan Bodin, Stockholm Resilience Centre

Mathematical modelling approaches of intermediate complexity - Steven Lade, Stockholm Resilience Centre, Nordic Institute for Theoretical Physics

#### Tuesday, May 6, 18:15 - 20:00

Master Class on Resilience & Development - Melissa Leach, Luca Alinovi, Brian Walker

#### Wednesday, May 7, 8:30 - 10:00

PLENARY SESSION - PASTEUR - DENNIS MEADOWS, MODERATOR

Which development pathways within planetary boundaries? Melissa Leach, Institute of Development Studies - Johan Rockström, Stockholm Resilience Center

#### Wednesday, May 7, 10:20 - 11:20

SESSION 54 - PASTEUR

Whose planet? Whose 'boundaries'? A dialogue on the politics of 'planetary boundaries' - David Lansing

Whose planet? Whose 'boundaries'? A dialogue on the politics of 'planetary boundaries' - Erle Ellis, University of Maryland Baltimore County

A Polycentric Approach to Planetary Boundaries? - Galaz Victor, Stockholm University

Addressing Pathological Dynamics of Global Environmental Problems - Anne-Sophie Crépin, The Beijer Institute of Ecological Economics, Stockholm Resilience Centre

Planetary Boundaries and a Resilient Anthropocene - Garry Peterson, Stockholm Resilience Centre

**Power, pathways and planetary boundaries : Negotiating green and just transformations** - Melissa Leach, Social, Technological and Environmental Pathways to Sustainability Centre, Institute of Development Studies

Whose Land? Planetary Opportunities for People, Land and Nature - Erle Ellis, Geography & Environmental Systems, University of Maryland Baltimore County



Measuring, assessing, profiling (MAP) community resilience: psychosocial dimensions - Astier Almedom

Measuring, assessing, profiling (MAP) community resilience : psychosocial dimensions - Astier Almedom, Lund University

From individual to community resilience. The role of perception and optimism in disaster risk reduction -Sara Bonati, Università degli Studi di Padova Recovering after a Shock: A Unified Concept of Resilience for measurement and public Action - Jean-Marcel Koffi, Université Alassane Ouattara

Taking it to the extremes: resilience and adaptation to severe heat and cold health risks - Raquel Nunes, School of Environmental Sciences, University of East Anglia, UK, Tyndall Centre for Climate Change Research, School of Environmental Sciences, University of East Anglia, UK

Using mixed methods to analyze household and community resilience in conflict affected areas of South Sudan - Marco D'Errico, Food and Agriculture Organization of the UN - Daniel Maxwell, Tuft University - Luca Russo, Food and Agriculture Organization of the UN

SESSION 56 - ANTIGONE 3



Tips or Traps? Advancing understanding to steer clear of impoverishment traps and tipping points - Niki Frantzeskaki

**Tips or Traps? Advancing understanding to steer clear of impoverishment traps and tipping points** - Niki Frantzeskaki, Dutch Research Institute For Transitions - Keith Tidball, Dept. of Natural Resources, Cornell University

A gilded trap of our own making : anthropocentric discursive traps as barriers to transformation - Keith Tidball, Dept. of Natural Resources, Cornell University

Avoiding urban social-ecological system traps by accounting for both ecosystem services and disservices - Timon McPhearson, The New School Tishman Environment and Design Center

From poverty trap to ecosystem service curse : A review of the payments for ecosystem services literature - Jakub Kronenberg, University of Lodz

Perverse resilience : A systematic review of traps in socialecological systems - Jamila Haider, Stockholm Resilience Centre

The Reification Trap or "Following the Data Around"- Resilience and the Sustainability Hangover - Richard Stedman, Cornell University

The transitions perspective on the institutional mechanisms behind traps in social-ecological systems -Niki Frantzeskaki, Dutch Research Institute For Transitions

SESSION 57 - BARTHEZ

Archaeological Studies of the Long-Term Resilience of Food Supplies to Climatic Shocks in Arid North America and the North Atlantic -Jacob Freeman

Archaeological Studies of the Long-Term Resilience of Food Supplies to Climatic Shocks in Arid North America and the North Atlantic - Jacob Freeman, Arizona State University - Colleen Strawhacker, National Snow and Ice Data Center, Cooperative Institute for Research in Environmental Science (CIRES) - Andrea Torvinen, Arizona State University - Seth Brewington, City University of New York - Geoorge Hambrecht, The University of Maryland

**Extinction and Survival in the Norse North Atlantic - the Archaeology of Resilience in Greenland and Iceland** - George Hambrecht, University of Maryland

Mediating a Landscape of Risk : A Comparative Case Study of the Ancient U.S. Southwest and the North Atlantic - Colleen Strawhacker, National Snow and Ice Data Center, University of Colorado

The cost of maintaining resilience in marginal island environments : An example from the Faroe Islands - Seth Brewington, City University of New York

The Robustness of Plant Assemblages to Climate Shocks and the Evolution of Agroecological Systems -Jacob Freeman, Arizona State University

SESSION 58 - RONDELET



Towards a Sustainable and Socially Just Transformation: Reflections on Polanyi - John Thompson

Towards a Sustainable and Socially Just Transformation: Reflections on Polanyi and the Emergence of New Forms of Governance and Social Relations in Uncertain Times - John Thompson, The STEPS Centre, University of Sussex - Maja Göpel, Wuppertal Institute for Climate, Environment and Energy, Germany - David Manuel-Navarrete, Global Institute of Sustainability, School of Sustainability, Arizona State University, USA - Moriz Remig, Institute for Advanced Sustainability Studies, Potsdam

Ecosystem Services through Polanyi's lens: from fictitious commodification to behavioral incentives for cultural ecosystem functions - Moritz Remig, University of Kassel, Institute for Advanced Sustainability Studies

Green Transformations from Below: Learning from Karl Polanyi and His 'Double Movement' - John Thompson, The STEPS Centre, University of Sussex

Karl Polanyi's Countermovement and Polycentric Governance in Socio-Ecological Systems - David Manuel-Navarrete, Arizona State University

Polanyian insights for empowering socio-ecological transformation strategies within market societies - Maja Goepel, Wuppertal Institute for Climate, Environment and Energy

#### Wednesday, May 7, 11:30 - 12:30

SESSION 59 - PASTEUR

Integrating Industrial Ecology and Applied Sustainability with Resilience Thinking - Samir Doshi

Integrating Industrial Ecology and Applied Sustainability with Resilience Thinking - Marian Chertow, Steve Evans, Timothy Smith



Metrics for Adaptive Capacity and Resilience - Fabrice DeClerck

Metrics for Adaptive Capacity and Resilience - Fabrice DeClerck, Bioversity International

Adaptive capacity of terrestrial moisture recycling societies: Integrating social-ecological dynamics to reveal clues for resilience - Patrick Keys, Stockholm Resilience Center, Colorado State University

Analysis of Household Resilience in Pastoral and Agro-Pastoral Communities : A Case Study of Uganda - Carlo Azzarri, International Food Policy Research Institute - Melanie Bacou,International Food Policy Research Institute - Katharine Downie, International Livestock Research Institute

How do ecologists measure resilience? - Rachel Standish, The University of Western Australia

**Testing for Household Resilience to Food Insecurity : Evidence from Nicaragua** - Federico Ciani, University of Florence, Department of Economics and Management



Analysing and managing social-ecological regime shifts - Steven Lade

**Analysing and managing social-ecological regime shifts** - Steven Lade, Nordic Institute for Theoretical Physics, Stockholm Resilience Centre - Maja Schlüter, Stockholm Resilience Centre

**Detecting Tipping Points in Social-Ecological Systems** - Vasilis Dakos, Estacion Biologica de Donana, CSIC

**Exploring multistability in social-ecological systems - An empirical assessment using global land cover data** - Daniel Ospina-Medina, Stockholm Resilience Centre

Human decisions and resilience dynamics. How systemic analysis of historical cases could help addressing human-environment problems - Roman Seidl, Institute for Environmental Decisions, ETH Zurich

Identifying social-ecological regime shifts : Challenges and insights from the Regime Shifts Database - Reinette (Oonsie) Biggs, Stellenbosch University, Stockholm University The value-added of laboratory experiments for the study of social-ecological regime shifts - Caroline Schill, The Beijer Institute of Ecological Economics, Stockholm Resilience Centre

SESSION 62 - BARTHEZ



Co-producing Musical Soundscapes: Expanding Experiential Knowledge about Complex Environmental Change - Kaitlyn Rathwell

**Co-producing Musical Soundscapes: Expanding Experiential Knowledge about Complex Environmental Change** - Kaitlyn Rathwell, University of Waterloo, Environmental Change Governance Group, Post-Normal - Andrea Mauro, Post-Normal

#### SESSION 63 - RONDELET

Histories of Innovation and transformation in complex systems - Ola Tjörnbo

Histories of Innovation and transformation in complex systems -Ola Tjörnbo, Waterloo Institute of Complexity and Innovation

Insights into Complex Social Transformation Processes, for inclusion in the panel "Histories of Innovation and Transformation in Complex Systems" - Frances Westley, Waterloo Institute for Social Innovation and Resilience

The Global Derivatives Market as a Social Innovation - Sean Geobey, University of Waterloo

The Internet as a Social Innovation: The Role of Initial Conditions and Ideological Landscapes in Shaping the Development of the World Wide Web - Ola Tjörnbo, Waterloo Institute of Social Innovation and Resilience

The Legalization of Birth Control in North America: A Historical Reflection on the Emergence of this Social Innovation - Jaclyn Blacklock, The Waterloo Institute for Social Innovation and Resilience

One Test: How a new idea about what differentiates cognitive ability shifted social outcomes and shaped valuation over the 20th century? - Katharine McGowan, University of Waterloo



Social-Ecological Networks – an emerging transdisciplinary approach to study social-ecological systems - Orjan Bodin, Beatrice Crona

Social-Ecological Networks - an emerging transdisciplinary approach to study social-ecological systems - Orjan Bodin, Beatrice Crona, Stockholm Resilience Centre

Are Existing Institutions Prepared ("Fit") for Ocean Acidification? - Julia Ekstrom, Natural Resources Defense Council

Building blocks of sustainability: how different patterns of socialecological interdependencies can explain governance outcomes -Orjan Bodin, Stockholm Resilience Centre

The problem of spatial fit: Comparing social and ecological connectivity using a spatially explicit network approach - Arvid Bergsten, Stockholm Resilience Centre

Tracing social-ecological connectivity across scales : exploring the relation between trade and fish extraction patterns in Lake Nabugabo, Uganda - Stuart Kininmonth, örjan Bodin, Beatrice Crona, Ismael Vaccaro, Lauren Chapman

Transformations from a social-ecological network perspective -Diego Galafassi, Orjan Bodin



Access to land, resources & services - Peter Verburg

Essential factors to adoption land-uses in Central America rural contexts - Victor Meza, Universidad Nacional de Costa Rica

Modeling conceptual framework of social changes in Sahelian land and natural resources uses and regulations - Hermine Papazian, PhD Student

Renewable Energy policy implementation in Spain from a territorial perspective - Richard Hewitt, Veronica Hernandez Jimenez

#### SESSION 66 - SULLY 3

#### **Disaster Resilience 1 - Anne Leitch**

**Mega-disaster and Socio-ecological Transitions** - Wei Liu, International Institute for Applied Systems Analysis

**Promoting Socio-Organizational Resilience in Disaster: Toward a Measurement Framework of Network Capacity** - Branda Nowell, North Carolina State University - Toddi Steelman, University of Saskatchewan

Urban resilience to natural disasters and the performance of disaster management organisations under change. Results from a modelling study - Gunnar Dressler, Department of Ecological Modelling, Helmholtz Centre for Environmental Research - UFZ, Leipzig, Germany

#### SESSION 67 - JOFFRE 5



The value of place-based research in an era of big data - Tobias Plieninger, Claudia Bieling, Joern Fischer

The value of place-based research in an era of big data - Tobias Plieninger, University of Copenhagen

The value of place-based research for large scale landscape change modelling - Peter Verburg, VU University Amsterdam

"What did you do and why?"- linking local knowledge to largescale assessments - Matthias Bürgi, Swiss Federal Research Institute WSL - Urs Gimmi, Swiss Federal Research Institute WSL

#### SESSION 68 - JOFFRE A

'Resilience is not an ideology': Dialogue on methods and strategies for communicating resilience for sustainable development - Miriam Huitric

'Resilience is not an ideology': communication and learning about resilience in promoting change and transformation - Emily Boyd, Stockholm University, University of Reading - Miriam Huitric, Stockholm University

Improving the application of science and democratic engagement: Communication in teams as complex systems -Bridie McGreavy, Laura Lindenfeld, Maine's Sustainability Solutions Initiative

**Participatory democracy, networks between institutions, education and resilience.** Research in progress - Gabriella Calvano, University of Bari

Rethinking resilence: reflections on the earthquakes in christchurch, New Zealand 2010 and 2011 - Bronwyn Hayward, School of Political and social Science, University of Canterbury, New Zealand

"We should no more release an untested communication on the public than an untested drug": A methodology to develop and test education and communication tools for promoting adaptation to climate change - Torsten Grothmann, University of Oldenburg, Dr. Grothmann - Research & Consulting - Natalie Glas, Markus Leitner, Andrea Prutsch, Veronika Wirth, Environment Agency Austria

## SESSION 69 - JOFFRE B

Community-based management - Madhu Sarin

Adaptation to climate change and resilience of territories: revealing drivers of socio-ecological systems changes in 3 watershed of Latin America - Jean-Francois Le Coq, UMR ART-Dev, UNA - CINPE

Analysing complex social-ecological systems: A model of sustainability in community-based forest management - Ulrich Frey, University of Giessen

Community Forest Management: Well Defined Strategy to Address Climate Change Challenges in India - Nabaghan Ojha, Centre for Development and Alternative Technologies

**Communication strategies for sustainable management of mussel culture in Mar Piccolo (Mediterranean Sea)** - Carmela Caroppo, National Research Council, Institute for Coastal Marine Environment

#### **Resilience & Economics 1 - Marie-Gabrielle Piketty**

**Explaining perverse resilience in mainstream economic theory and policy propositions: an evaluation of competing hypothesis** -Tom Green, Stockholm Resilience Centre

Tradeoffs between ecological and economic stakes for biodiversity offsets. How mitigation banking support marine and freshwater ecosystems resilience in Florida, USA? - Anne-Charlotte Vaissière, Unité d'Economie Maritime, AMURE-Centre de droit et d'économie de la mer

Resilience issue in an ecological compensation system: the case study of the first French habitat banking - Claude Napoléone, Thierry Dutoit, Coralie Calvet, Unité Ecodéveloppement, INRA

#### SESSION 71 - JOFFRE D

#### Resilience, tourism and protected areas - Meriem Bouamrane

"Wow Factors": The Cultural Services of Birds within Private Protected Areas - John Heydinger, Percy FitzPatrick Institute of African Ornithology

Adaptive Management to Enhance Resilience in Sustainable Land Use - Case studies from Ramsar Wetland Sites in Japan, Slovakia -Mari Shioya, Institute of Forestry Ecology, Slovak Academy of Sciences

Ecotourism's evaluation and resilience in the Annapurna Conservation Area, Nepal - Nabin Baral, University of Washington

The role of private protected areas in governmental conservation systems - a case study in South Africa - Julia Baum, Percy FitzPatrick Institute of African Ornithology, University of Cape Town

Wildlife-tourism, local communities and tiger conservation: A village-level study in Corbett Tiger Reserve, India - Archi Rastogi, McGill University



Eat and Drink: Land-Food-Water nexus Arrangements shaping Resilience - Olivier Barreteau

Eat and Drink: Land-Food-Water nexus Arrangements shaping Resilience - Olivier Barreteau, Institut de Recherche en Sciences et Technologies de l'Environnement et de l'Agriculture

Symbiosis or Exploitation? Assessing the Ramifications of Rural-Urban Water Transfers in Tamil Nadu, India - Shanmuga Priya Gnanasekaran, PhD Candidate, College of Architecture and Planning, University of Colorado Denver

SESSION 73 - JOFFRE 4

#### **Detecting vulnerabilities - Christo Fabricius**

Identifying Hotspots of Human Risk from Ocean Acidification -Julia Ekstrom, Natural Resources Defense Council

Tracking social-ecological vulnerability using network analysis: Insights from an avian influenza outbreak in an ostrich production network - Christine Moore, Percy FitzPatrick Institute of African Ornithology

Using language to detect potential change in ecosystem services in the light of ecological surprises - Juan Carlos Rocha, Stockholm Resilience Centre



PhD Workshop on 'Framing urban resilience, innovation and development' - Rafael Balanzo, Josep Maria Torrents

PhD Workshop on "Framing urban resilience, innovation and development" - Lorenzo Chelleri, Autonomous Barcelona University - james Waters, Tyndall Centre for Climate Change -Sebastian Becker, Goettingen University - Rachna Lévêque, University College London - deepika andavarapu, School of Planning University of Cincinnati - Rafael Balanzo, ELISAVA Barcelona school of Design - Josep Maria Torrents, Universidad Politecnica de Catalunia From climate vulnerability to climate resilience: an applied research for Catalan urban systems - Josep M. Torrents Abad, Polytechnic University of Catalonia - BarcelonaTech

Governing for resilience: responding to the complexities of urban densification - Rachna Lévêque, Happold Consulting, University College London

#### SESSION 75 - JOFFRE 1-2



Biodiversity and Ecosystem services supporting urban resilience - a global perspective - Pamela Muehlman

Biodiversity and Ecosystem services supporting Urban Resilience - a global perspective - Pamela Muehlmann

The Role of Peri-Urban Communities and Natural Reserves for the Resilience of Metropolitan Areas: The Case of Mexico City -Rafael Calderon-Contreras, Universidad Autónoma Metropolitana

Understanding urban fragmentation and ecosystem services delivery for enhanced resilience - Patrick O'Farrell, The Council for Scientific and Industrial Research

Urban Resilience and the Accommodation of Cemeteries and Funeral/Mourning Rituals in the City of Johannesburg - Tsepang Leuta, University of the Witwatersrand

#### SESSION 76 - JOFFRE 1-3

Andean communities in the face of global change: Risks, uncertainties and opportunities for transformation - Part A: "Knowledge, intervention and innovation - Diana Sietz, Giuseppe Feola

Andean communities in the face of global change: Risks, uncertainties and opportunities for transformation - Part A: "Knowledge, intervention and innovation" - Diana Sietz, Wageningen University

Examining Conservation and Adaptation: Asociación Ecosistemas Andinos (ECOAN) and the Indigenous Communities of the Vilcanota - Caitlin Doughty, Yale School of Forestry and Environmental Studies

Family mountain farming between melting glaciers, an Andean metropolis and the world market - a case study from the Cordillera Real in Bolivia - Dirk Hoffmann, Bolivian Mountain Institute

Modeling Farmer community resilience to crop pests in the tropical Andes - Olivier Dangles, IRD, UMSA

Quechua Farmers' Innovation for Resilience - Vanesa Ramos Abensur, Asociacion para la Naturaleza y el Desarrollo Sostenible

SESSION 77 - JOFFRE 1-4

Environmental Policies, Ecosystem-Services - Stig Wandén

Conflicts and synergies in environmental policies - Stig Wandén, Independent expert

Going Beyond Ecosystem Services - Methodological and Theoretical Linkages to Social-Ecological Systems - Marion Mehring, Institute for Social-Ecological Research, Biodiversity and Climate Research Centre

What is in it for me? The ecosystem services perspective as currently implemented in Swedish environmental policy and practice - Sara Borgstrom, Stockholm Resilience Centre, Stockholm University

SESSION 78 - JOFFRE 1-5



**Decision-support systems - Pierre Bommel** 

Assessing Resilience in the Horn of Africa - an Applied Information Economics Approach - Eike Luedeling, World Agroforestry Centre

Linking Resilience Thinking and Structured Decision Making For Natural Resource Planning and Management - Noelle Hart, Nebraska Cooperative Fish & Wildlife Research Unit, School of Natural Resources, University of Nebraska -Lincoln

Organisational resilience to climate change effects: Creating a combined learning simulation and research tool - Sebastian Thomas, The University of Queensland

The decision support system O'GAMELAG for the management of Mediterranean coastal lagoons - Annie Fiandrino, Ifremer-LER-LR

#### Wednesday, May 7, 14:30 - 15:30





Which Mathematical Formalizations of Resilience and What For? -**Guillaume Deffuant, Jean Denis Mathias** 

Which Mathematical Formalizations of Resilience and What For? - Rachata Muneepeerakul, Arizona State University - Steven Lade, Stockholm Resilience Center - Jeroen Groot, Wageningen University, Farming Systems Ecology Group - Luc Doyen, Université de Bordeaux, Gretha - Bruno Bonté, Gestion de l'Eau, Acteurs et Usages

Adaptation and transformation from a complex systems perspective - Steven Lade, Stockholm Resilience Centre, Nordic Institute for Theoretical Physics

Quantification of vulnerability and resilience of agro-ecosystems by exploratory systems modeling - Jeroen Groot, Wageningen University, Farming Systems Ecology Group

Shifts that divide populations - Rachata Muneepeerakul, Arizona State University





A global comparison of drivers and ecosystem service impacts of regime shifts - Reinette (Oonsie) Biggs

A global comparison of drivers and ecosystem service impacts of regime shifts - Reinette (Oonsie) Biggs, Stellenbosch University, Stockholm University - Garry Peterson, Stockholm University

**Causes and Consequences of Regime Shifts: A Network Analysis** of Global Environmental Change - Juan Carlos Rocha, Stockholm **Resilience** Centre

Exploring alternate social-ecological regimes - An empirical assessment of multistability using global land cover data - Daniel Ospina-Medina

Regime shifts of human-environment systems: historical analysis and modelling - Roman Seidl, Institute for Environmental Decisions, ETH Zurich

The Regime Shifts Database: Analytical framework & comparison of ecosystem service impacts - Reinette (Oonsie) Biggs, Stellenbosch University, Stockholm University

SESSION 81 - BARTHEZ

Imagining the Future in the Anthropocene - Overcoming Cognitive Limitations with the Help of Art and Culture - Manjana Milkoreit

Imagining the Future in the Anthropocene - Overcoming Cognitive Limitations with the Help of Art and Culture - Manjana Milkoreit, Global Institute of Sustainability - Kaitlyn Rathwell, University of Waterloo, Environmental Change Governance Group, Post-Normal

Bridging Inuit and Scientific knowledge about socioenvironmental change via collaborative mural making - Kaitlyn Rathwell, Post-Normal, Environmental Change Governance Group, University of Waterloo

Necessity and Impossibility - Imagining the Future in Global Climate Negotiations - Manjana Milkoreit, Global Institute of Sustainability

SESSION 82 - RONDELET



Harnessing the potential of innovations for food system resilience in the Global South : Research insights from South Asia and Sub-Saharan AfricaSouth Asia and Sub-Saharan Africa - Samir Doshi

Harnessing the potential of innovations for food system resilience in the Global South : Research insights from South Asia and Sub-Saharan Africa - Samir Doshi, Centre for Industrial Sustainability, University of Cambridge - Timos Karpouzoglou, Stockholm Resilience Centre - Laura Pereira, Department of Environmental and Geographical Science, University of Cape Town - Anneli Sundin, Beijer Institute of Ecological Economics

From farm-level ingenuity to agricultural transformation: Incorporating multi-scale processes in the analysis of 'climate smart' agricultural innovations - Timos Karpouzoglou, Stockholm **Resilience Centre** 

How orphan crop innovation can provide a tool of systemic transformation in the food system, whilst building adaptation to climate change - Laura Pereira, Department of Environmental and Geographical Science, University of Cape Town

Resilience and agricultural innovation projects in Africa: delivering transformational agriculture and development in practice? - Henny Osbahr, University of Reading

The role of agricultural innovations for the re-greening of the Sahel - Anneli Sundin, Stockholm Resilience Centre, Stockholm University, Beijer Institute of Ecological Economics

Using Information and Communication Technologies for Resilience of Farming Communities in India - Samir Doshi, University of Cambridge



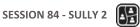
**Understanding Collaboration in Governance Arrangements through** Network Analysis Part 1 - Mark Andrachuk, Steven Alexander

**Understanding Collaboration in Governance Arrangements** through Network Analysis Part 1 - Mark Andrachuk, Steven Alexander, Environmental Change and Governance Group (ECGG), Faculty of Environment, University of Waterloo

Examining local level dynamics in an emerging network of comanaged marine reserves in Jamaica - Steven Alexander, Environmental Change and Governance Group (ECGG), Faculty of Environment, University of Waterloo

Investigating an emerging network for small-scale fishery governance in the Cau Hai lagoon and what it means for socialecological transformation - Mark Andrachuk, Environmental Change and Governance Group (ECGG), Faculty of Environment, University of Waterloo

Quantitative mapping of qualitative expert knowledge for identifying intervention hubs with systemic impact in socioecological networks - Tobias Luthe, University of Applied Scienes HTW Chur, Switzerland



**Resilience & land thinking - Yves Laumonier** 

Fore-sighting transformation and development: lessons learned in engaging multiple stakeholders to improve land use decisions in Indonesia - Yves Laumonier, Centre de Coopération Internationale en Recherche Agronomique pour le Développement

Resilience and the challenge of social resistance to landscape transformation - Karen Foley, UCD School of Architecture,

The role of integrated landscape initiatives in shaping landscape resilience : a synthesis of experiences from Africa, Latin America and Asia - Abigail Hart, Cornell University, EcoAgriculture Partners

Revisiting urban planning to integrate multifunctional agriculture policies by the means of landscape metrics and indices : a methodological proposal - Esther Sanz Sanz, École des hautes études en sciences sociales, Unité de recherche d'Écodéveloppement



Disaster Resilience 2 - Wei Liu

A place based assessment of community resilience to natural hazards in Lesotho - Moipone Mantsebo Letsie, University of the Witwatersrand

Pathways for adaptive and integrated disaster resilience - Riyanti Djalante, Local Government of Kendari City

**Resilience and Development : Linking Services with Adaptive** Capacity - Fawad Khan, Institute for Social and Environmental Transition



#### **Knowledge Systems for Transformation and Resilient Development** - Deborah Bossio

A model of knowledge transfer and integration at the sciencepolicy interface - Tamara Hochstrasser, University College Dublin -School of Biology and Environmental Science

Agricultural biodiversity, knowledge systems and policy decisions: the case of farmers' seeds - Daniel Clavel, Cirad

Integrating Interdisciplinary Datasets and Participatory Methods for Accelerating the Adoption of Resilient Farming Systems in East Africa - Leigh Winowiecki, International Center for Tropical Agriculture

Resilience assessment of the grassland ecosystems in Three Rivers Source Region of China : 1960–2010 - Zhihui Li, University of Chinese Academy of Sciences, Beijing, China, Center for Chinese Agricultural Policy, Chinese Academy of Sciences, Beijing, China, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China

#### SESSION 87 - JOFFRE A

'Resilience is not an ideology' Part 2 - Emily Boyd

Governing complex commons: the role of communication for experimental learning and coordinated management - Therese Lindahl, Stockholm Resilience Centre, The Beijer Institute of **Ecological Economics** 

Modeling Learning-By-Doing: Managing a Renewable Resource Undergoing Effects of Climate Change - Emilie Lindkvist, Stockholm Resilience Centre

Using transformative learning to examine the role of climate change communication in fostering stakeholder engagement with adaptation - Åsa Gerger Swartling, Stockholm Environment Institute, Stockholm Resilience Centre





Working with Community Stakeholders to Improve Food System **Resilience : comparison across Industrialized and Developing Countries - Molly Anderson, Casey Hoy** 

Working with Community Stakeholders to Improve Food System **Resilience : comparison across Industrialized and Developing** Countries - Molly Anderson, College of the Atlantic

SESSION 89 - JOFFRE C

**Resilience & Economics 2 - Richard Norgaard** 

BLUE+ : a dedicated blue carbon policy and finance mechanism for the proposed Tun Mustapha Park in Sabah, Malaysia -Sebastian Thomas, The University of Queensland

Design of an environmental accounting system oriented toward value creation - Jean Robert Nchekoua Tchoumba, United Nations University Headquarters

Ecological restoration of Mediterranean coastal lagoons and its socioeconomic valuation - Rutger De Wit, UMR "Ecologie des Systèmes marins côtiers (Ecosym)"

Exploring linkages between ecosystem service payments, peasant livelihoods, and plantation agriculture - David Lansing, University of Maryland Baltimore County



Urban sustainability & water - Claudia Pahl-Wostl

Naming the dragons: Exploring success and challenge in a grassroots Canadian Transition Town initiative - Cheryl Lyon, Transition Town Peterborough

People's Perception of Natural Resources - Understanding Urban Ecological Resilience of Surface Watercourses in Medellín, Colombia - Luisa Fernanda Roldan Rojas, Institut of Regional Science, Karlsruhe Institute of Technology

Size, Shape and Dispersion: Urban form evolution in Saigon River Basin and its impacts on hydrologic performance from 1990 to 2010 - Dzung Nguyen, CPG Consultants

The Social Ecology of Urban Resilience - Raul Lejano, New York University

Transformation or Maladaptation? Exploring the influence of desalination on Melbourne's water resilience - Briony Ferguson, Monash Water for Liveability, Cooperative Research Centre for Water Sensitive Cities, Monash University



Resilience of the groundwater economies in developing countries -**Olivier Petit, Marcel Kuper** 

Resilience of the groundwater economies in developing countries - Olivier Petit, Centre lillois d'études et de recherches sociologiques et économiques - Marcel Kuper, Institut Agronomique et Vétérinaire Hassan II, Centre de Coopération Internationale en Recherche Agronomique pour le Développement

Resilience of agricultural subsector dependant on groundwater: the case of fresh onion in Saiss (Morocco) - Caroline Le Jars, Centre de Coopération Internationale en Recherche Agronomique pour le Développement, Institut Agronomique et Vétérinaire Hassan II

Resilience of groundwater dependent farming systems in a global change context: conceptual framework and empirical study in Morocco - Jean-Daniel Rinaudo, Bureau de recherches géologiques et minières

Saharan pioneer front in Algeria: does the concept of resilience make sense in a context of rapidly expanding profitable agriculture? - Ali Daoudi, Ecole Nationale Supérieure d'Agronomie d'Alger - Caroline Le Jars, CIRAD

SESSION 92 - JOFFRE 4

Metrics for adaptive capacity and resilience Part 2 - Fabrice DeClerck

An econometric approach to measure how household resilience changes over-time due to the occurrence of shocks - Alberto Zezza, World Bank - Marco D'Errico, Food and Agriculture Organization of the UN

Vulnerability and Resilience: Developing Metrics to Measure Sustainable Diets and Food Systems - Thomas Allen, Bioversity International

SESSION 93 - JOFFRE 1-1



Putting poverty at the heart of urban climate resilience : reflections from Asia - Richard Friend, Marcus Moench, Shiraz Wajih, Khanin Hutanuwatr

#### Putting poverty at the heart of urban climate resilience :

reflections from Asia - Richard Friend, Institute for Social and Environmental Transition - Marcus Moench, Institute for Social and Environmental Transition - Shiraz Wajih, Gorakhpur Environmental Action Group - Khanin Hutanuwatr, King Mongkut Institute for Technology - Lat Krabang



Marine Governance Transformation Outcomes: the good, the bad and the ugly - Stefan Gelcich, Joshua Cinner, John N. (Jack) Kittinger

Marine Governance Transformation Outcomes : the good, the bad and the ugly - Stefan Gelcich, Departamento de Ecología, Facultad de Ciencias Biologicas, Pontificia Universidad Católica de Chile, Casilla, 114-D, Chile, Centro de Conservacion Marina & Laboratorio Internacional en Cambio Global, Pontificia Universidad Catolica de Chile - Joshua Cinner, ARC Center of Excellence in Coral Reef Studies, James Cook University - John N. (Jack) Kittinger, Stanford University, Center for Ocean Solutions, Stanford Woods Institute for the Environment

A sea change on the African coast? Early social and ecological outcomes of a governance transformation in Kenyan fisheries -Josh Cinner, ARC Centre of Excellence for Coral Reef Studies, James Cook University

#### Beyond transformations in Chilean marine governance:

stewardship, traps and the need for innovation cycles - Stefan Gelcich, Departamento de Ecología, Facultad de Ciencias Biologicas, Pontificia Universidad Católica de Chile, Casilla, 114-D, Chile, Centro de Conservacion Marina & Laboratorio Internacional en Cambio Global, Pontificia Universidad Catolica de Chile

**Emergence of co-management governance for coral reef fisheries** - John Kittinger, Stanford University, Center for Ocean Solutions,

Hawaii Fish Trust, Conservation International

#### SESSION 95 - JOFFRE 1-3

Andean communities in the face of global change: Risks, uncertainties and opportunities for transformation - Part B : "Institutions and agency" - Diana Sietz, Giuseppe Feola

Andean communities in the face of global change : Risks, uncertainties and opportunities for transformation - Part B: "Institutions and agency" - Diana Sietz, Wageningen University

Building resilience to climate change in the tropical Andes - A transformative strategy to increase resilience and adaptive capacity - Tomas Lindemann, Food and Agricultural Organization of the United Nations

Dynamics of institutional change to multiple exposures in smallholding communities in the Colombian Andes - Giuseppe Feola, Department of Geography and Environmental Science, University of Reading

Local livelihoods and vulnerabilities to climate change in the Andean Region - Harry Diaz, University of Regina

Vulnerability and resilience of smallholder farming systems in the Peruvian Altiplano - Victor Mares, International Potato Center

#### SESSION 96 - JOFFRE 1-4

Pathways of Resilience in a Rapidly Changing Alaska - Kevin Hillmer-Pegram, Winslow Hansen, Casey Brown

Pathways of Resilience in a Rapidly Changing Alaska - Kevin Hillmer-Pegram, University of Alaska Fairbanks - Winslow Hansen, University of Wisconsin - Casey Brown, Chas Jones, Douglas Cost, Katie Spellman, Richard Hum, Robin Bronen, Archana Bali, Berill Blair, University of Alaska Fairbanks

A Scenario Exploration of Operationalizing the Principles of Resilience-Based Governance through a Specific Policy Option in the Bering Strait - Kevin Hillmer-Pegram, University of Alaska Fairbanks - Martin Robards, University of Alaska Fairbanks, Wildlife Conservation Society

Counter-strategies to Risks in Alaskan Oil Development : The Politics of Inclusion and the Potential for Fostering Resilience -Berill Blair, University of Alaska Fairbanks

Economic consequences of driftwood harvest in a changing climate : Integration of local knowledge and scientific data - Chas Jones, International Arctic Research Center, University of Alaska Fairbanks

Facebook as a tool for monitoring social-ecological system challenges : An exploratory study - Richard Hum, University of Alaska Fairbanks, Resilience and Adaptation Program, Department of Communication

Generalizable Principles for Ecosystem Stewardship-Based Management of Social-Ecological Systems : Lessons Learned from Alaska - Winslow Hansen, Department of Zoology, University of Wisconsin Madison

Incorporating Resilience Thinking into Management of a Moosehunter System in Alaska - Casey Brown, Institute of Arctic Biology, University of Alaska Fairbanks Resilience and Adaptation Program

Integrated assessments: operationalizing human rights protections for climate-induced relocations - Robin Bronen, Alaska Institute for Justice, University of Alaska Fairbanks

Local perspectives on social and ecological changes in the Human-Rangifer Systems of North America - Archana Bali, Dept of Humans & Environment and Institute of Arctic Biology, University of Alaska Fairbanks

#### Wednesday, May 7, 15:40 - 16:40

#### Freetime

SALON DU BELVÉDÈRE

Forum Theatre on Resilience and Development

#### **ANTIGONE 1**

Student organizing committee : "Cultivating a community of young scolars - Where to from here?"

#### **ANTIGONE 3**

Documentary films on the management of ground water ressources and agriculture in algeria and Morocco

#### RONDELET

Presentation of book Treesilience, World Agroforestery Center (ed)

#### Wednesday, May 7, 17:10 - 18:10



Which Mathematical Formalizations of Resilience and What For? Part 2 - Guillaume Deffuant, Jean Denis Mathias

Resilience and Vulnerability in the Framework of Viability : an illustration with ball-and-cup diagrams - Charles Rougé, Laboratoire d'ingénierie pour les systèmes complexes

Applying viability theory for improving forest management in global change context - Bruno Bonté, Gestion de l'Eau, Acteurs et Usages

**Eco-viability modelling for the resilience of socio-ecosystems** - Luc Doyen, CNRS, GREThA, University of Bordeaux

#### SESSION 98 - ANTIGONE 3

Regime shifts in health and disease: Exploring transitions for improving human health and well-being - Marta Berbes-Blazquez

Regime shifts in health and disease: Exploring transitions for improving human health and well-being - Marta Berbes-Blazquez, York University, Faculty of Environmental Studies, Instituto Regional de Estudios en Sustancias Toxicas - Jordan Oestreicher, Université du Québec à Montréal, Centre interdisciplinaire de recherche sur la biologie, la santé, la société et l'environnement

**Disease outbreaks: regime shifts & contagion disturbance** - Juan Carlos Rocha, Stockholm Resilience Centre

Regime shifts and health risks in the Brazilian Amazon: the case of the PLUPH project and mercury and Chagas disease exposure -Oestreicher Jordan Sky, Université du Québec à Montréal/Institut des sciences de l'environnement, Canadian community of practice in ecoystem appraoches to health

**Regime shifts in and Indian slum: addressing social, environmental and health relationships** - Martin Bunch, York University, Faculty of Environmental Studies



The role of visual arts as a communication tool in scenario planning - Jan Hanspach

The role of visual arts as a communication tool in scenario planning - Jan Hanspach, Leuphana University Lueneburg

Drawing the future of transhumance in Spain through participation: a tool for understanding social-ecological relationships - Elisa Oteros-Rozas, Social-Ecological System Laboratory, Dpt. Ecología, Universidad Autónoma de Madrid

Primitivism as an artistic approach to depict future scenarios: the case of Ciénaga Grande (Santa Marta, Colombia) - Sandra Vilardy, Universidad del Magdalena - Instituto Humboldt - Berta Martín-López, Universidad Autonoma de Madrid [Madrid] - José A. González, Social-ecological Systems Laboratory - Elisa Oteros-Rozas, Social-ecological Systems Laboratory

#### SESSION 100 - RONDELET

#### **Discontinuities and Resilience - Craig Allen**

**Discontinuities and Resilience** - Craig Allen, US Geological Survey, Nebraska Cooperative Fish & Wildlife Research Unit - Kirsty Nash, ARC Centre of Excellence for Coral Reef Studies, James Cook University - Trisha Spanbauer, University of Nebraska - David Angeler, Swedish University of Agricultural Sciences

**Discontinuities, cross-scale dynamics and the organization of ecosystems** - Kirsty Nash, ARC Centre of Excellence for Coral Reef Studies, James Cook University

**Discontinuity, variability and resilience** - Craig Allen, US Geological Survey, Nebraska Cooperative Fish & Wildlife Research Unit

Measuring the relative resilience of sub-arctic lakes to global change - David Angeler, Swedish University of Agricultural Sciences

Paleo-thresholds: What the past can tell us about abrupt changes in ecosystems - Trisha Spanbauer, Department of Earth and Atmospheric Sciences and School of Biological Sciences, University of Nebraska–Lincoln



Understanding Collaboration in Governance Arrangements through Network Analysis Part 2 - Mark Andrachuk, Steven Alexander

**Building Resilience in a Protected Area Network** - Kristine Maciejewski, University of Cape Town - Graeme Cumming, University of Cape Town

**Conservation governance networks : Is the tail wagging the dog?** - Rebecca Jarvis, Institute for Applied Ecology New Zealand, AUT University

Towards Co-Delivery of Climate Adaptation : Transformations in Cross-Scale Adaptive Governance Networks - Patrick Bixler, Colorado State University, Pinchot Institute for Conservation



Understanding challenges and opportunities facing a transition to more sustainable land-use systems in the Eastern Amazon - Joice Ferreira, Toby Gardner, Emilie Coudel

Understanding challenges and opportunities facing a transition to more sustainable land-use systems in the Eastern Amazon - Toby Gardner, University of Cambridge

Environmental compliance in the Brazilian Amazon: awareness, motivations, capacity and opportunities - Emilie Coudel, Toby Gardner, Joice Ferreira, Marie-Gabrielle Piketty

Interactions between social networks, well-being, and conservation behavior : a comparative study among different land users in eastern Amazonia - Rachael Garrett, Toby Gardner, Jos Barlow, Driss Ezzine De Blas

The end of slash-and-burn by Amazonian smallholders? - Luke Parry, Lancaster University

Trade-offs in the social-ecological values associated with different land-uses in the eastern Amazon - Toby Gardner, University of Cambridge

SESSION 103 - SULLY 3

#### Disaster resilience 3 - Jean-Marcel Koffi

Asian river Cities Bangkok and Phnom Penh in local politics of resilience: a buzzword or an operational concept for Asian Cities? - Celine Pierdet, Ywenn de la Torre, Connaissance et Organisation des systèmes techniques

From resilience to transformation - Lessons from cities that have experienced repetitive flooding in Saxony, Germany - Anna Kunath, Chloe Begg, Helmholtz Centre for Environmental Research - UFZ, Leipzig

Urban Growth in High Mountains: Understanding the Process and Building Urban Resilience to Climate Change and Natural Disasters in Himalaya - Prakash Chandra Tiwari, Kumaun University, Nainital, India



The biggest single opportunity we have is dialogue - Maria Schultz

The biggest single opportunity we have is dialogue - Maria Schultz, Stockholm University



Ecosystem Service and Resilience Evaluation of three basins : Volta, Zambezi and Mekong - Fabrice DeClerck, Fred Kizito, Matthew McCartney

Ecosystem Service and Resilience Evaluation of three basins: Volta, Zambezi and Mekong - Fabrice DeClerck, Bioversity International - Fred Kizito, International Center for Tropical Agriculture - Matthew McCartney, International Water Management Institute

#### Thursday, May 8, 08:30 - 10:00

**PLENARY SESSION - PASTEUR** - ALLIOUNE KANE (UNIVERSITY OF DAKAR, SÉNÉGAL), MODERATOR

Marine social and ecological systems between global stewardship and community management - Fikret Berkes, University of Manitoba, Canada - Terry Hughes, James Cook University, Australia

#### Thursday, May 8, 10:20 - 11:20

SESSION 106 - PASTEUR

**Community Resilience 1 - Helen Ross** 

Community resilience - Helen Ross, The University of Queensland

Coming to grips with panarchy: community resilience in a multilevel world - Fikret Berkes, University of Manitoba

**Community resilience: a transition theory perspective** - Geoff A Wilson, School of Geography, Earth and Environmental Sciences, University of Plymouth (UK)

**Re-configuring Resilience for Environmental Change: politics, practice and the role of scale** - Stewart Barr, University of Exeter -Ewan Woodley, University of Exeter



**Collaborative management - Michael Schoon** 

**Collaborative management in support of transformation and equity in access to ecosystem services : Revisiting theory through reflections on practice in the North and South** - Michael Schoon, School of Sustainability - Georgina Cundill, Rhodes University

Collaborative forms of management for transformation and equity in access to ecosystem services: Lessons from land reform processes in South Africa - Georgina Cundill, Rhodes University

**Diagnosing processes and outcomes in adapative comanagement** - a framework for comparative studies - Lisen Schultz, Stockholm Resilience Centre

Lessons from co-governance of ecosystems and protected areas in Australia: transformational change through collaborative riskmanagement - Rosemary Hill, CSIRO Ecosystem Sciences

Using adaptive co-management principles to stimulate development: Preliminary findings from the GLEAN project (A Global Survey of Learning, Participation and Ecosystem Management) at the Stockholm Resilience Centre - Simon West, Stockholm Resilience Centre

SESSION 108 - ANTIGONE 3



Resilience and development: progress for human development or for humanitarian governance? - Benoit Daviron

Resilience and development: progress for human development or for humanitarian governance? - Benoit Daviron, CIRAD -Christophe Bene, Institute of Development Studies - Véronique Ancey, Denis Pesche, François Bousquet, CIRAD Resilience and development: complement, substitute or stopgap solution - Véronique Ancey, CIRAD

Resilience thinking and adaptive co-management from the development lens: is there anything new? -Francois Bousquet, UPR GREEN

Resilience : New Utopia or New Tyranny? Reflection about the Potentials and Limits of the Concept of Resilience in Relation to Vulnerability-Reduction Programmes - Christophe Bene, Intitute of Development Studies

Struggles over Resilience and Sámi Reindeer Pastoralism in Norway - Tor A. Benjaminsen, Norwegian University of Life Sciences

SESSION 109 - BARTHEZ



#### Adaptation & mitigation - Bruno Locatelli

Synergies and trade-offs between climate change mitigation and adaptation in landscape management - Bruno Locatelli, Biens et services des écosystèmes forestiers tropicaux, Center for International Forestry Research

Adaptation-Mitigation synergies in Climate Finance - Giacomo Fedele, Center for International Forestry Research

Empowering stakeholders in the analysis of trade-offs and synergies between development and climate change objectives in Latin America - Raffaele Vignola, Centro Agronómico Tropical de Investigación v Enseñanza

Evaluating synergies and trade-offs between climate change adaptation and mitigation in forestry and agriculture in Belize -Rico Kongsager, UNEP Risoe Centre on Energy, Climate and Sustainable Development

Resilience and Transformation: Analysis at the Boundaries of Adaptation and Mitigation - Catherine Butler, Cardiff University



Cultural Ecosystem Services for social-ecological resilience and transformation - Maria Tengö

Cultural Ecosystem Services for social-ecological resilience and transformation - Maria Tengö, Erik Andersson, Stockholm Resilience Centre, Stockholm University - Keith Tidball, Dept. of Natural Resources, Cornell University

Cultural Ecosystem Services for social-ecological resilience and transformation - an introduction - Erik Andersson, Stockholm Resilience Centre, Stockholm University

Culture inextricably entwined with nature: the importance of cultural environmental values and relationships to human wellbeing - Michelle Cocks, Rhodes University

Sacred urban nature-trees and cultural ecosystem services in Bangalore, India - Maria Tengö, Stockholm Resilience Centre, Stockholm University

Urban design: Using CES to protect the natural capital of cities -Joan Nassauer, University of Michigan

#### Thursday, May 8, 11:30 - 12:30



Agroecological Transitions and Resilience - Danièle Magda, Michel Ftienne

Agroecological Transitions and Resilience - Danièle Magda, Agrosystèmes, Gestion des ressources, Innovations, Ruralités, Institut National de la Recherche Agronomique

Assessing vulnerability of agri-food systems to climate and policy changes: proposal of an integrated framework - Federica Ravera, Social-ecological Laboratory, University Autonomous of Madrid, Basque Centre for Climate Change

Capacities, institutions and development trajectories affecting the transformation of irrigated agriculture in the urbanizing SW United States - Hallie Eakin, School of Sustainability, Arizona State University

Exploring multi-scale flexibility to design resilient cropping systems - Anne Merot, INRA

Managing the trade-offs between factors that strengthen resilience - Ika Darnhofer, Dept. of Economics and Social Sciences, University of Natural Resources and Life Science, Vienna, Austria

Sustainable livelihood approach from the lens of the state-andtransition model: an integrated model for social-ecological research and management - Marcos Easdale, Instituto Nacional de Tecnología Agropecuaria

#### SESSION 112 - ANTIGONE 1



Reinventing, Remixing and Refixing - The Dynamics of Governance 'Experiments' - Galaz Victor

Reinventing, Remixing and Refixing - The Dynamics of Governance 'Experiments' - Galaz Victor, Stockholm University

Charismatic Governance - Frances Westley, Waterloo Institute for Social Innovation and Resilience

Governance Design for the Anthropocene - Jake Dunagan, Institute for the Future

Social Science Experiments in a Climate Change Resilience Context - Romano Wyss, Catholic University of Eichstätt-Ingolstadt

Social-ecological innovations and governance experiments for transformative change - Per Olsson, Stockholm Resilience Centre, Stockholm University



Resilience in development: a dialogue among practitioners and researchers - Deborah Bossio

Resilience in development: a dialogue among practitioners and researchers - Deborah Bossio, International Center for Tropical Agriculture, CGIAR Program Water, Land and Ecosystems

SESSION 114 - BARTHEZ

Assessing the Trade-Offs and Synergies between Coping, Adjusting and Transformation - Lindsay Stringer

Assessing the Trade-Offs and Synergies between Coping, Adjusting and Transformation - Rachel Berman, Sustainability Research Institute, School of Earth and Environment, University of Leeds - Steven Orchard, School of Earth and Enrironment [Leeds]

Linking livelihoods and ecosystem services: exploring mangrove social-ecological system dynamics in rural Vietnam - Steven Orchard, School of Earth and Enrironment [Leeds]

Policy trade-offs and synergies between agricultural modernisation and social-ecological resilience: the case of Uganda - Jami Dixon, Sustainability Research Institute, Institute for **Climate and Atmospheric Science** 

Trade-offs in coping with climate variability to building adaptive capacity to climate change: insights from Uganda - Rachel Berman, Sustainability Research Institute, School of Earth and Environment, University of Leeds

SESSION 115 - RONDELET



A science-policy dialogue on ecosystem services based interventions for poverty alleviation - broadening perspectives to address complexity - Maria Tengö

A science-policy dialogue on ecosystem services based interventions for poverty alleviation - broadening perspectives to address complexity - Maria Tengö, Stockholm Resilience Centre, Stockholm University - Oonsie Biggs, Stockholm Resilience Centre

A typology of ecosystem service based interventions for poverty alleviation - lessons learned and research needs - Maria Tengö, Stockholm Resilience Centre, Stockholm University

Linking ecosystem services to human well-being in a South African poverty hotspot - Maike Hamann, Stockholm Resilience Centre

Recognizing multifunctional landscapes in poverty alleviation strategies - lessons learned from Sudano-Sahelian Burkina Faso -Hanna Sinare, Stockholm Resilience Centre

Winners and losers - hidden trade-offs in ecosystem based poverty alleviation interventions. Insights from coastal East Africa - Tim Daw, Stockholm Resilience Centre, University of East Anglia

SESSION 116 - SULLY 1

#### Boundaries in socio-ecological systems - Luc Doyen

Agency, regimes, affordances: A case study look at cross-level system dynamics - Howard Silverman, Pacific Northwest College of Art, Pattern Labs

**Continuity through change: Sustainability, resilience and the vocabulary of paradox** - Keith Gibson, University of Calgary Faculty of Environmental Design

**Defining the "social" in the social-ecological system: a rural landscape** - Andrea Rawluk, Charles Sturt University, National Centre for Groundwater Research and Training

Understanding Boundaries in Social-Ecological Systems - Michael Schoon, School of Sustainability

#### SESSION 117 - SULLY 2

#### Community resilience 2 - Helen Ross, Fikret Berkes

**Community building for sustainability: Floreana's political process in search of socio-ecological resilience** - Esteban Ruiz-Ballesteros, Universidad Pablo de Olavide, de Sevilla

Social resilience in Cornish Fishing Communities - Huw Thomas, Plymouth University (Human Geography)

The contribution of Indigenous fisheries to cultural and community resilience: a case study from Aotearoa New Zealand -Chris Jacobson, Sustainability Research Centre - Henrik Moller, Centre for Sustainability : Agriculture, Food, Energy, Environment

"We would break but would not bend to pressure": Community resilience to disasters in the coastal Bangladesh context - Emdad Haque, University of Manitoba, Canada



Traditional knowledge and resilience - Louise Fortman

Local perceptions of environmental changes in the Brazilian Amazon : building an integrated knowledge - Leandra Fatorelli, Universidade de Brasília

Reading the ice oracles: Herders, climate scientists and mountain glaciers in an Andean community - Gustavo Valdivia, Johns Hopkins University, Department of Anthropology

Social-ecological systems in Mayan communities. A scientific and traditional knowledge perspective of groundwater management -Yolanda Lopez, Ludwig-Maximilians-Universität [München]

#### SESSION 119 - JOFFRE 5

Networks and Cooperation: are social network characteristics generalizable or specific to the environment in which they are embedded? - Jacopo Baggio

Networks and Cooperation: are social network characteristics generalizable or specific to the environment in which they are embedded? - Jacopo Baggio, Shauna BurnSilver, Center for the Study of Institutional Diversity, School of Human Evolution and Social Change, Arizona State University - Örjan Bodin, Stockholm Resilience Center - Ola Tjörnbo, Waterloo Institute of Complexity and Innovation, University of Waterloo

Linking social networks to opinion formation: how social networks influence social opposition to large infrastructure development in Southern California - Jacopo Baggio, Center for the Study of Institutional Diversity, School of Human Evolution and Social Change, Arizona State University

Multiplexity in food sharing and cooperative networks: Implications for household vulnerability in the Alaskan North -Shauna BurnSilver, School of Human Evolution and Social Change, Center for the Study of Institutional Diversity, School of Sustainability, Arizona State University - Jacopo Baggio, Center for the Study of Institutional Diversity, School of Human Evolution and Social Change, Arizona State University Network characteristics and integrated ecosystem-based coastal zone management in Sweden - Orjan Bodin, Stockholm Resilience Centre

**Resilience and Virtual Social Networks: A study of 100 Cases** - Ola Tjörnbo, Waterloo Institute of Complexity and Innovation



Resilience, food security and poverty - Benoît Lallau

Fostering social learning and innovation to transform Australian food security international aid and development programs : insights from moving from theory to practice - James Butler, CSIRO Ecosystem Sciences - Samantha Stone-Jovicich, CSIRO Ecosystem Sciences - Nicky Grigg, CSIRO Ecosystem Sciences -Peter Wilson, AusAID - Joanna Hicks, Australian Centre for International Agriculture Research

**Resilience in practice: Building resilience to face recurring environmental crisis in African Sahel** - Emily Boyd, Stockholm University, University of Reading

#### Rural households in sub-Saharan Africa: conceptual

considerations and methodological issues on resilience - Benoît Lallau, Centre lillois d'études et de recherches sociologiques et économiques - Isabelle Droy, Unité mixte internationale Résiliences

The poverty of resilience and the resilience of poverty - Katrina Brown, Environment and Sustainability Institute

Understanding Resilience in the context of Food and Nutrition Security - Christophe Bene, Intitute of Development Studies



#### Human - animals relationships - Duan Biggs

Are communities rich in ecological functions favouring diseases transmission in return? - Eléonore Hellard, Percy FitzPatrick Institute of African Ornithology, University of Cape Town

Human-carnivore coexistence in a traditional rural landscape -Ine Dorresteijn, Leuphana University Lüneburg, Faculty of Sustainability

Managing large carnivores on small protected areas: The importance of accounting for scale in decision-making - Hayley Clements, Centre for African Conservation Ecology, Nelson Mandela Metropolitan University, Percy FitzPatrick Institute of African Ornithology, University of Cape Town



#### **Resilience science & policy - John Marty Anderies**

A typology of vulnerability tradeoffs in social-ecological systems: Harnessing complexity to yield design lessons for resilient development - Rimjhim Aggarwal, School of Sustainability, Arizona State University - John Anderies, School of Sustainability, Arizona State University

Coherence at a crossroad : examining the normative implications of resilience science - Michele-Lee Moore, Department of Geography, University of Victoria - Manjana Milkoreit, Arizona State University

**Resilience Practice for Buildings and Cities** - Josh Stack, Northeast Green Building Consulting



Governance design for transformation and adaptation in socialecological systems - Ted Lefroy

Governance design for transformation and adaptation in socialecological systems - Ted Lefroy, Centre for Environment, University of Tasmania

Designing governance interventions in transforming systems: case studies of biodiversity planning for the Australian Alps and Tasmanian Midlands - Michael Mitchell, School of Geography and Environmental Studies, University of Tasmania

Institutional change for landscape-scale biodiversity conservation in the Australian Alps and Tasmanian Midlands - Sarah Clement, School of Veterinary and Life Sciences, Murdoch University Landscapes and policy: integrating science into governance design - Ted Lefroy, Centre for Environment, University of Tasmania



#### Power and agency - Tor Benjaminssen

Bringing politics back in: a political study of the resilience and sustainability of century-old irrigation systems in Switzerland -Rémi Schweizer, Swiss Graduate School of Public Administration, University of Lausanne

Promoting agency and empowerment in resilience programming - Emily Wilkinson, Overseas Development Institute - Maggie Ibrahim, World Vision UK

The Missing link Agency: Contribution from social theory and critical realism - Hiroe Ishihara, University of Cambridge

Understanding and managing environmental conflict for social resilience - Anthony Kung, School of Chemical Engineering, University of Queensland, International WaterCentre

#### SESSION 125 - JOFFRE 4

#### Resilience & marine SES 1 - Luis Outero

An entitlements approach for the analysis of ecosystem service benefits in the western Indian Ocean - Christina Hicks, ARC Center of excellence for coral reef studies, James Cook University, Center for Ocean Solutions - Stanford University

Resilience or resistance? A story of recruitment failure in Norfolk crab fisheries - Carole White, University of East Anglia

Social-ecological trade-offs in a highly regulated fisheries system: the Baltic Sea - Jonas Hentati-Sundberg, Stockholm University

Why it is so difficult to reduce illegal fishing of salmon in the Russian Far East? - Dmitry Lajus, St.Petersburg state university

#### SESSION 126 - JOFFRE 1-1

Art-Science Interfaces In Resilience Research - Galafassi Diego

Art-Science Interfaces In Resilience Research - Galafassi Diego, Stockholm Resilience Centre - Anna Emmelin, Stockholm Resilience Centre

SESSION 127 - JOFFRE 1-2

**Resilience and rural SES 1 - Charles Staver** 

Smallholder multi-strata coffee farm management under pressure - contributions from resilience analysis to scientistfarmer collaborative research strategies - Charles Staver, Bioversity International

The family agriculture as an agent of resilience to the regional development: the case of West Santa Catarina - Brazil - Rudinei Exterckoter, Instituto Federal Catarinense - Campus Concórdia, Universidade Federal de Santa Catarina - Clécio Silva, Universidade Federal de Santa Catarina

The structure of complex cocoa agroforestry systems is the key of their resilience. Study case of Central Cameroon - Patrick Jagoret, UMR Fonctionnement et conduite des systèmes de culture tropicaux et méditerranéens



#### Resilience and the energy sector - Claudia Binder

Stimulating co-evolutionary behaviour of renewable energy systems: the integrated energy landscape as vehicle for the energy transition - Jessica Boer, Department of Spatial Planning & Environment [Groningen]

The German energy transition as a regime shift - Sebastian Strunz, Helmholtz-centre for environmental research

The role of resilience for sustainable transformations: Insights from energy regions - Claudia Binder, University of Munich, Department of Geography, Human-Environment Relations

#### SESSION 129 - JOFFRE 1-4

#### Adaptive co-management 1 - Sanda Kaufman

Resilience in governance for sustainable development systems: research agenda and initial findings -Valerie Sheppard, Simon Fraser University

Strengthening resilience in wetland social ecological systems: Exploring the potential role of adaptive co-management -Nokuthula Dubazane, Rhodes University, WWF-Mondi Wetlands Programme

The integration of science and social knowledge for better management of socio-ecological systems and increasing the resilience of invaluable ecosystems to regime shifts - Linda Luvuno, Mondi Wetlands Programme



Programme on Ecosystem Change and Society (PECS) - Norström Albert

Programme on Ecosystem Change and Society (PECS) - Norström Albert, Stockholm Resilience Centre

A social and ecological assessment of tropical land-uses at multiple scales: the Sustainable Amazon Network - Toby Gardner, University of Cambridge

A social-ecological case study in Central Romania - Joern Fischer, Leuphana University Lüneburg

Identifying Cross-System Drivers for Resource Governance and Stewardship in Fisheries, Water, and Forests Commons: Synthesis of Global Datasets Using Neural Networks and Regression Trees -Xavier Basurto, Duke university [Durham] - Ulrich Frey, Giessen University

Reflection on the epistemological and methodological challenges of PECS : linking local challenges at PECS case-studies to global ones - Patricia Balvanera, Centro de Investigaciones en Ecosistemas, Universidad Nacional Autónoma de México

Social-ecological dynamics of ecosystem services in the Norrström basin (SEEN) - Megan Meacham, Stockholm Resilience Center

Understanding the complex relationship between ecosystem services and the wellbeing of the poor in coastal Kenya and Mozambique - Sustainable poverty alleviation from coastal ecosystem services (SPACES) - Tim Daw, Stockholm Resilience Centre, University of East Anglia

#### Thursday, May 8, 14:30 - 15:30



The potentials and limitations of polycentric governance for enhancing resilience in SESs in times of global change - Nadine Methner

The potentials and limitations of polycentric governance for enhancing resilience in SESs in times of global change - Nadine Methner, Institute of Environmental Systems Research, University of Osnabrück - Claudia Pahl-Wostl, Institute of Environmental Systems Research, University of Osnabrück - Kathrin Knüppe, Institute of Environmental Systems Research, University of Osnabrück - Victor Galaz, Stockholm Resilience Centre - Erik Mostert, Delft University of Technology - Keith Richards, University of Cambridge - Andre Silveira, University of Cambridge - Harini Nagendra, Ashoka Trust for Research in Ecology and the Environment - Ralph Hamann, Graduate School of Business, University of Cape Town

"Polycentricity and the Information Revolution - Exploring the Interface" - Galaz Victor, Stockholm University

**Expressions of polycentric governance in actor networks** - Nadine Methner, Institute of Environmental Systems Research, University of Osnabrück

How adaptive are polycentric governance systems? - Erik Mostert, Delft University of Technology

**Polycentric governance - a multi-faceted concept** - Claudia Pahl-Wostl, Institute of Environmental Systems Research, University of Osnabrück

**Polycentricity - the interplay of formal and informal processes driving change in water management practices** - Keith Richards, University of Cambridge, Department of Geography

SESSION 132 - ANTIGONE 1 [ 💮

Behavioral Experiments of Social-Ecological Systems - Marco Janssen

**Behavioral Experiments of Social-Ecological Systems** - Marco Janssen, Center for the Study of Institutional Diversity, Arizona State University

Effective institutions produce inefficient outcomes - Experimental evidence from Pakistan - Thomas Falk, Institut für Kooperation in Entwicklungsländern

**Playing games to save water** - Marco Janssen, Center for the Study of Institutional Diversity, Arizona State University



Resilience science & policy part 2 - Caroline Petersen

Incorporating resilience principles into project design in UNDP's Ecosystems and Biodiversity portfolio - Caroline Petersen, United Nations Development Programme

Resilience and Sustainable Development : insights from the Drylands of Eastern Africa - Lance Robinson, International Livestock Research Institute

Resilience in ecosystem management: can we make the concept more concrete? - Richard Hobbs, University of Western Australia



#### Rigths & resilience 1 - Emily Boyd

Linking rights and resilience: encounters with power, politics and the law - Jonathan Ensor, Stockholm Environment Institute - York, Centre for Applied Human Rights, University of York - Emily Boyd, Stockholm University, University of Reading

A rights-based perspective on adaptive capacity - Jonathan Ensor, Centre for Applied Human Rights, University of York

**Incorporating power into resilience thinking** - Christopher Lyon, University of Dundee

Power, knowledge and experiments: framing development practice for an uncertain climate future - Jonathan Ensor, Centre for Applied Human Rights, University of York

Resilience and Democracy: Using Associative Democratic Theory to Reconcile the Needs of People and Ecosystems - Ola Tjörnbo, Waterloo Institute of Complexity and Innovation

SESSION 135 - RONDELET [ 🏦 🏼 🕰

Ecosystem Services revisited: From scientific concept to policy practice - Jos Brils

Ecosystem Services revisited: From scientific concept to policy practice - Jos Brils, Deltares - Adriaan Slob, TNO [Pays-Bas] - Tijs van Maasakkers, Harvard Kennedy School of Government - Nicolas Dendoncker, University of Namur - Luis Outeiro, University of los Lagos - Sylvestre Delmotte, Department of Natural Resource Science, McGill University

**Disentangling synergies and trade-offs between marine ecosystem services in Southern Chile** - Luis Outeiro, University of los Lagos (Chile)

**No Root, No Fruit - Sustainability and Ecosystem Services** - Nicolas Dendoncker, University of Namur

Participatory assessment of ecosystem services and their resilience in the design of sustainable landscapes - Sylvestre Delmotte, Department of Natural Resource Science, McGill University



#### **Panarchies - Lance Gunderson**

Amazonian Panarchy: Searching for bioclimatic resilience in the Amazon basin - Guillaume Drapeau, Centre d'Enseignement et de Recherches sur l'Environnement et la Société - Environmental Research and Teaching Institute, Pôle de Recherche pour l'Organisation et la Diffusion de l'Information Géographique

From urban sustainability to urban resilience: Barcelona City as a Panarchy - Rafael Balanzo-Joue, Work Research Programme, Actions Without Borders, International Union of Architects, Research Institute for Sustainability Science and Technology, Polythecnic University of Catalonia, Barcelona Tech - Francesc Magrinya, Research Institute for Sustainability Science and Technology, Polythecnic University of Catalonia, Barcelona Tech

Reading the Crisis of the Malian Cotton Belt through the Panarchy Model - Jean Etienne Bidou, Isabelle Droy

Enframing the future: Resilience as a way to produce time, duration and scales in the politics of environmental hazards -Sebastien Nobert, Department of Geography, King's College London

#### SESSION 137 - SULLY 2

**Community Resilience 3 - Fikret Berkes** 

Community resilience - Helen Ross, The University of Queensland

Community resilience and efficient management of biosphere reserves : a review - Meriem Bouamrane, UNESCO

Creative resilience: Building community resilience through arts practice - Katrina Brown, Environment and Sustainability Institute

**Evaluating programmes and projects aiming to enhance community engagement and resilience** - Ioan Fazey, University of Dundee

Research methods for exploring, building and monitoring community resilience - Helen Ross, The University of Queensland

SESSION 138 - JOFFRE 5

Urban Environmental Stewardship - Galafassi Diego

Urban Environmental Stewardship - Galafassi Diego

**Citizen networks in India's Garden City: Protecting urban ecosystems during rapid urbanization** - Johan Enqvist, Stockholm Resilience Centre, Stockholm University

Environmental stewardship in rapidly growing cities: The emergence and spread of citizen engagement in lake restoration and protection in Bangalore, India - Johan Enqvist, Stockholm Resilience Centre, Stockholm University

Learning to overcome the legacy of apartheid in South Africa: Using biodiversity conservation to unlock development in segregated social-ecological landscapes - Simon West, Stockholm Resilience Centre

The extinction of nature experiences in children's connectedness with urban nature - Matteo Giusti, Stockholm Resilience Centre



Resilience, food security and poverty - Françoise Gérard

Agrobiodiversity as a Key Strategy for Increased Resilience and Food Sovereignty: Reflections from a Case Study in Malawi -Rachel Bezner Kerr, Cornell University - Sieglinde Snapp, Michigan State University - Valerie Ota, Tufts University

Characterize a terroir to better understand the sustainability issues of rural areas - Philippe Prevost, Montpellier SupAgro

**Examining the changing web of food system resilience in Nepal** - Ajaya Dixit, Institute for Social and Environmental Transition

#### SESSION 140 - JOFFRE B

#### **Conservation & social capital - Dirk Roux**

For or against the motion? Assessing the role of social capital in driving community action in the context of tiger conservation in India - Sneha Thapliyal, Indian Institute of Management Bangalore

National conservation targets and local management action: a socio-technical process for moving from disconnect to synergy - Dirk Roux, South African National Parks

The value of time in conservation: the importance of timesharing activities on local empowerment - Marina Garcia-Llorente, Sociology of Climate Change and Sustainable Development research group, Department of Social Analysis, University Carlos III, Madrid, Social-Ecological Systems Laboratory, Department of Ecology, Universidad Autónoma de Madrid

#### SESSION 141 - JOFFRE C

Operationalising resilience thinking in multi-stakeholder contexts: Assessing the catalytic role of scientists - Erin Bohensky

An Approach to Improve Coastal Community Resilience Through Design of a Recreational Trail. A Master Plan for the Mississippi Coastal Heritage Trail - Tatiana Parfenova, Ohio State University, Knowlton School Of Architecture

Citizen science for conservation in Eastern Europe: obstacles and opportunities for volunteer-based butterfly monitoring in Romania - Jacqueline Loos, Leuphana University, Faculty of Sustainability

JUST-A-GRID, when people co-model fair resource allocation - Nils Ferrand

Mosquito Fleet Thinking: a Community-Linked Network for Detection of Change in Coastal Waters - Buzz Holling, Resilience Alliance - Eddy Carmack, Fisheries and Oceans

The role of stakeholders in management of social ecological systems, an example for the coastal zone interface - Adriaan Slob, TNO



#### Global problems & systems configurations - Aurélie Botta

Conceptualising Resilience of Developing Country Communities: Applying a Systemic Framework to New Technologies in a Rural Context - Angelica Valeria Ospina, University of Manchester, Centre for Development Informatics - Richard Heeks, University of Manchester, Centre for Development Informatics

Integrating planetary boundaries into the life cycle assessment framework for assessing absolute environmental sustainability of products and systems - Anders Bjørn, Technical University of Denmark

Local or Global Commons? Application of Framework for Analysing SES for Soil Biodiversity at EU level -Tatiana Kluvankova-Oravska, CE SPECTRA, Slovak University of Technology and Institute of Forest Ecology, SAS, CETIP Network

Towards a typology of SES configurations for analysis of change in SES - Maja Schlüter, Stockholm Resilience Centre



#### Gender perspective - Fédérica Ravera

Does resilience-based management of communal grazing land address gender inequity? A case study in the highlands of Ethiopia - Lemlem Aregu Behailu, Centre for Development Research (CDR), University of Natural Resources and Life Science, Vienna, Austria

Goals of Adaptation in Place : Family, Community, Place - Natasha Hanson, University of Prince Edward Island - Christopher Lyon, University of Dundee

The Influence of Gender on Adaptive Capacity and Transformation: Examples from Swedish reindeer herding communities - Astri Buchanan, School of Environment and Sustainability, University of Saskatchewan Using a gender lens to understand the role of agro-biodiversity in adaptation to climate change - Federica Ravera, Social-ecological Systems Laboratory, University Autonomous of Madrid, Ethnoecology Laboratory- Institut de Ciència i Tecnologia Ambientals - Universitat Autònoma de Barcelona



#### Resilience & marine SES 2 - Vasili Dakos

Has the ecosystem approach benefited or hindered the restoration of Great Lakes ecosystem resilience? - Savitri Jetoo, Savitri Jetoo

**Poverty, Degradation and Rebuilding Fisheries: Social-Ecological Resilience in India and Brazil** - Prateep Nayak, Environmental Change and Governance Group - University of Waterloo

What insights are offered by experiences of the "Ecosystem Approach"? Exploring the critical effects of institutional inertia and evolution - Kerry Waylen, The James Hutton Institute

Who is my patron? What enables social change towards cooperative self-governance of small-scale fisheries? - Emilie Lindkvist, Stockholm Resilience Centre



Mobility 1 - Véronique Ancey

**Migration, climate change and resilience in China** - Mark Tebboth, Tyndall Centre for Climate Change Research

Rainfalls Agent-Based Migration Model - Peru: Linking rainfall and migration in the Shullcas sub-basin -Andrea Milan, School of Global Studies, Sussex University

The social-ecological resilience of mobility networks in relation to hurricanes: The politics of resilience in Eastern Canada - Stephanie Sodero, Memorial University



**Resilience and rural SES 2 - Céline Dutilly** 

Afterres 2050 : feed the French in 2050 - Marc Deconchat, INRA

Farming system models for supporting farm resilience: Research needs, gaps and promising approaches - Quang Bao Le, Natural and Social Science Interface (NSSI), ETH Zurich

Resilience and risk management: application to farms in the Etang de l'Or catchment area (Mauguio, Hérault) - oussama Mghirbi, Université Paul-Valéry - Montpellier 3 - Philippe LE GRUSSE, Institut agronomique méditerranéen de Montpellier -Jean Paul BORD, Université Paul-Valéry - Montpellier 3



The TURAS Project : Integrating resilience thinking into urban planning - Laura Alvarez

The TURAS Project : Integrating resilience thinking into urban planning - Laura Alvarez, University College Dublin - Dermot Foley, University College Dublin - Johanna Varghese, Dublin City Council



Adaptive co-management 2 - Michel Etienne

Adaptive co-management of honey bees and crops: any resilient issue in France? - Michel Etienne, INRA

Assessing to what extent planning impacts institutional resilience - Emeline Hassendorfer, Australia National University, Gestion de l'Eau, Acteurs et Usages

Evolution of Collaborative Resilience and Adaptive Capacity in the Commons through Self-organized Learning Processes: the Case of the Mt. Seongmi Community in Seoul, Republic of Korea -Onnuri Kim, Graduate School of Agricultural and Life Sciences, University of Tokyo

Fostering resilience in legacy cities - a case study - Sanda Kaufman, Cleveland State University



#### Ecosystem change and society in southern and western Africa -Reinette (Oonsie) Biggs

**Ecosystem change and society in southern and western Africa** -Reinette (Oonsie) Biggs, Stockholm University, Stellenbosch University - Raphaele Ducrot, Gestion de l'Eau, Acteurs et Usages

Access to land, water and ecosystem services: Identifying sources of innovation for social-ecological transformation in South Africa - Karabo Chadzingwa, Georgina Cundill

Collaborative forms of governance in the context of land reform: trade-offs in the pursuit of more equitable access to ecosystem services - Georgina Cundill, Rhodes University

**Ecosystems and society in southern africa: traps and transformations** - Christo Fabricius, Sustainability Research Unit, Nelson Mandela Metropolitan University

Mapping social-ecological systems at different scales - Maike Hamann, Stockholm Resilience Centre

## Thursday, May 8, 15:40 - 16:40

SESSION 150 - PASTEUR



Transformative capacities and urban ecologies at the forefront of resilience and sustainability – challenges and opportunities in urban planning - Thomas Elmqvist, Stefan Barthel, Lorenzo Chelleri

Transformative capacities and urban ecologies at the forefront of sustainability - challenges and opportunities in urban planning -Lorenzo Chelleri, Autonomous Barcelona University - Stephan Barthel, Stockholm University, Dep of History and Stockholm Resilience Centre - Erik Gómez-Baggethun, Catalan Institute of Science and Technology - Tom Henfrey, Schumacher institute - Niki Frantzeskaki, Dutch Research Institute For Transitions

Building resilience bottom-up via multi-scale urban transitions Can urban agriculture initiatives in European Cities foster urban resilience and propel urban sustainability transitions? - Niki Frantzeskaki, Dutch Research Institute For Transitions

Exploring synergies and trade-offs related to the implementation of the ecosystem services approach in the governance of shrinking cities - Dagmar Haase, Humboldt Universität zu Berlin and Helmholtz Centre for Environmental Research - UFZ

Mapping ecosystem services in the urban region of Barcelona to support local and regional decision-making - Francesc Baró, Erik Gómez-Baggethun, Institute of Environmental Science and Technology, Universitat Autònoma de Barcelona, Social-Ecological Systems Laboratory, Autonomous University of Madrid

Transformative capacities and urban ecologies at the forefront of sustainability challenges-from a behavioral science and cognitive perspective - Stephan Barthel, Stockholm Resilience Centre, Stockholm Univresity

**Transition management as a meta-governance experiment to build energy resilience in European cities** - Niki Frantzeskaki, Dutch Research Institute For Transitions - Derk Loorbach, Dutch Research Institute For Transitions



## Behavioral Experiments of Social-Ecological Systems 2 - Marco Janssen

**Behavioral Experiments of Social-Ecological Systems** - Marco Janssen, Center for the Study of Institutional Diversity, Arizona State University

Social Network Structure and Collective Action in Uncertain Commons Dilemmas - J. Marty Anderies, Center for the Study of Institutional Diversity, Arizona State University

Social-Ecological Connectivity in the Lab - Diego Galafassi

**Tipping collective action in social networks** - Marco Janssen, Center for the Study of Institutional Diversity, Arizona State University SESSION 152 - ANTIGONE 3



The role of the State in fostering social and ecological resilience and adaptability - Stefania Munaretto

The role of the State in fostering social and ecological resilience and adaptability - Stefania Munaretto, Institut for Environmental Studies, VU University Amsterdam

Explaining institutional persistence, adaptation, and transformation in East German recreational fisheries governance after the German reunification in 1990 - Katrin Daedlow, Humboldt-Universität zu Berlin

Policy Development on Water-Energy Structure for Green Industry Development in Mongolia - Jae-Hwan Park, University of Cambridge



Rigths & resilience 2 - Jonathan Ensor

Adaptive adjudication and multi-stable moralities: Human rights adjudication as a site of learning for social-ecological resilience - Simon West, Stockholm Resilience Centre

Effective Legal Governance and SES Resilience in the Baltic Sea -Brita Bohman, Faculty of Law, Stockholm University

**Resolving the Incongruence at the Intersection of Ecology and Law** - Olivia Green, United States Environmental Protection Agency

**The Principle of Resilience** - Lia Helena Demange, Pace University School of Law, Pires Castanho Law Firm, University of Sao Paulo School of Law



Ecosystem Services revisited: From scientific concept to policy practice - Jos Brils

**Opportunities and challenges for mainstreaming ecosystem services in development planning** - Nadia Sitas, Université de Stellenbosch, The Council for Scientific and Industrial Research

SESSION 155 - SULLY 1

The adaptive cycle - Graeme Cumming

Applying the adaptive cycle in engineering design - James Miller, University of Guelph

**Rethinking theories of collapse: unravelling the adaptive cycle** - Graeme Cumming, University of Cape Town

The collective debate: evaluating resilient social-ecological patterns of the agriculture sector in northern Tajikistan - Corrie Hannah, Nicholas School of the Environment, Duke University



Trade-offs and synergies: what do we learn from community-based management of environmental challenges? - Grégoire Leclerc

Trade-offs and synergies: what do we learn from communitybased management of environmental challenges? - Grégoire Leclerc, Centre de Coopération Internationale en Recherche Agronomique pour le Développement - Jay Mistry, Royal Holloway College - Bettina Matzdorf, Leibniz-Centre for Agricultural Landscape Research - Ma del Mar Delgado, Universidad de Cordoba

All pain, no gain? The role of Civil Society Organizations (CSO) in Ecosystem Service Management - Bettina Matzdorf, Leibniz-Zentrum für Agrarlandschaftsforschung - ZALF (GERMANY)

**Community-Based Management: Trade-offs between sustainability and development** - M. Mar Delgado, University of Cordoba - Pablo Ramos, Pontificia Universidad Javeriana

Differentiated vulnerabilities and adaptive responses to climatic, economic and institutional stressors in Mexico's Calakmul Biosphere Reserve - Diana Calvo-Boyero, Universitat Autònoma de Barcelona - Institut de Ciència i Tecnologia Ambientals

EcoAdapt: Adaptation to climate change for local development in model forests of Argentina, Bolivia and Chile: trade-offs for supporting robust local processes at the science-society interface - Grégoire Leclerc, CIRAD Emerging challenges for community-based management in the Guiana Shield, South America: identifying policy trade-offs and synergies using system viability - Jay Mistry, Royal Holloway College

Resilient Communities: Citizen Participation in the Sustainable Management of Natural Resources - Ugo Guarnacci, European Commission

SESSION 157 - SULLY 3



Identifying key areas for resilience research - Garry Peterson

Identifying key areas for resilience research - Garry Peterson, Stockholm Resilience Centre - Daniel Ospina-Medina, Stockholm Resilience Centre

Key frontiers of resilience research: results of a delphi study -Garry Peterson, Stockholm Resilience Centre



Resilient Planet, Resilient People: looking for Ecological Solidarity and Stewardship? - Raphaël Mathevet, Stuart Chapin III

Resilient Planet, Resilient People: looking for Ecological Solidarity and Stewardship? - Raphaël Mathevet, Centre d'écologie fonctionnelle et évolutive

SESSION 159 - JOFFRE A

Integrating climate resilience and disaster resilience for comprehensive food security - Takeshi Sakurai

Integrating climate resilience and disaster resilience for comprehensive food security - Takeshi Sakurai, Institute of Economic Research, Hitotsubashi University - Chieko Umetsu, Graduate School of Fisheries Science and Environmental Studies, Nagasaki University

How small scale farmers cope with two different timings of heavy rainfall events in Southern Zambia - Hidetoshi Miyazaki, RIHN (Research Institute for Humanity and Nature)

Potential Role of Formal Insurance in Sustainable Food Production and Natural Resources Management - Takeshi Sakurai, Institute of Economic Research, Hitotsubashi University

Resilience of social-ecological systems for food security: Bridging climate and disaster resilience - Chieko Umetsu, Graduate School of Fisheries Science and Environmental Studies, Nagasaki University

SESSION 160 - JOFFRE B

Coasts, Communities and Conservation: Applying a Social-Ecological Systems Lens - Anthony Charles

Coasts, Communities and Conservation: Applying a Social-Ecological Systems Lens - Anthony Charles, School of the Environment, Saint Mary's University - Prateep Nayak, Environmental Change and Governance Group - University of Waterloo - Cristiana S. Seixas, University of Campinas (UNICAMP) -Laura Loucks, Royal Roads University

**Communities, Conservation, Livelihoods and Resilience: The Community Conservation Research Network** - Anthony Charles, Saint Mary's University

**Environmental change, traditional ecological knowledge and adaptive capacity of Caiçara fishers in coastal Brazil** - Cristiana Seixas, University of Campinas

Linking regime shifts and environmental governance for socialecological resilience in coastal lagoon systems - Prateep Nayak, Environmental Change and Governance Group (ECGG), Faculty of Environment, University of Waterloo



Operationalising resilience thinking in multi-stakeholder contexts: Assessing the catalytic role of scientists - Erin Bohensky

**Operationalising resilience thinking in multi-stakeholder contexts: Assessing the catalytic role of scientists** - Erin Bohensky, CSIRO Ecosystem Sciences - James Butler, CSIRO Ecosystem Sciences - Yiheyis Maru, CSIRO Ecosystem Sciences

#### SESSION 162 - JOFFRE D



#### **Transformation process - Denis Gautier**

A theory of transformative agency in linked social-ecological systems - Lisen Schultz, Stockholm Resilience Centre

A typology of resilience: resistance, and marginal and fundamental change - John Handmer, Centre for Risk & Community Safety, RMIT University

Transformation to a resilient city, the effort from promoting cycling: A case study of Copenhagen, Denmark - Jianping Gu, Graduate Program in Sustainability Science global leadership initiative, School of Frontier Sciences, the University of Tokyo -Beibei Zhang, Graduate Program in Sustainability Science global leadership initiative, School of Frontier Sciences, the University of Tokyo

Understanding Policy Processes in Social-Ecological Systems: integrating political science frameworks into SES research - Kirill Orach, Maja Schlüter

When to adapt or when to transform? Using network controllability to assess how manageable are regime shifts - Juan Carlos Rocha, Stockholm Resilience Centre



Social science, Policy and Development - Samantha Stone-Jovicich

The Social Sciences and Social-Ecological Resilience: Past Trends, New Developments, and Contested Frontiers - Samantha Stone-Jovicich, CSIRO

Understanding Policy Processes in Social-Ecological Systems: integrating political science frameworks into SES research - Kirill Orach, Maja Schlüter

La résilience, une opportunité de repenser nos logiques d'aide -Anna Gades, Food and Agricultural Organization of the United Nations



Resilience & marine SES 3 - Beatrice Crona

Breaking down the resilience of conflict and distrust in a Nova Scotia Multi-Species Fishery - Allain Barnett, Center for the Study of Institutional Diversity, Arizona State University

Indirect 'tragedy of the commons' as a result of Pacific salmon hatcheries. Why there is a lack of understanding of the problem? - Julia Lajus, National Research University Higher School of Economics; European University at St. Petersburg

Rethinking the blue planet: Integrating social and ecological resilience attributes within a climate-response management framework for marine protected areas - Sebastian Thomas, The University of Queensland

The good, the bad and the ugly of seafood trade: unraveling the effects of global seafood trade on local fisheries systems -Beatrice Crona, The Royal Swedish Academy of Sciences, Stockholm Resilience Centre



#### Mobility 2 - François Bousquet

Hydropower development and local livelihood adaptation: a longitudinal case study in Lao PDR - Olivier Joffre, International consultant, Phnom Penh Cambodia

Investigating the role of waterbirds in the ecological resilience of freshwater systems - Chevonne Reynolds, Percy FitzPatrick Institute of African Ornithology, University of Cape Town

Participatory Research and Social-ecological Resilience after Development-induced Displacement and Resettlement by the Jirau Hydroelectric Plant in the Brazilian Amazon - Berenice Simao, Secretary of Education of Rondônia, Brazil - Simone Athayde, University of Florida, Center for Latin American Studies, Tropical Conservation and Development Program, Centerfor Latin American Studies, University of Florida.

Resilience, social-ecological system and pastoral mobility : the risk of simplification - Sergio Magnani, CIRAD

#### **Resilience and rural SES 3 - Bernard Triomphe**

Farmers' drought adaptation in the southwest Netherlands: an agent-based approach - Rianne van Duinen, Deltares, University of Twente

How resilience thinking contributes to a more sustainable development of agriculture and rural areas: a first appraisal of case studies in 14 countries - Karlheinz Knickel, SD Innovation



Urban agriculture - Matteo Giusti

**Conceptualizing Agricultural Change for the Functional Integrity of Urban SESs** - Julia C. Bausch, School of Sustainability

**Does urban gardening could help poor people to be more resilient?** - Charlotte Da Cunha, CEARC/OVSQ - Mateo Cordier, CEARC/OVSQ

Steakholders and Steakeaters in the Nairobi Urban Region Foodshed - Arthur Getz Escudero, School of Planning and Geography

Urban transition in Vietnam: What we can learn from farmland conversion for urban development in peri-urban areas of Hue City? - Phuc Nguyen, Utrecht University

SESSION 168 - JOFFRE 1-4

#### **Collaborative resilience 3 - Bruce Goldstein**

**Collaborative Resilience in Practice III: Governance -** Mike Jones, Swedish Biodersity Center, Uppsala - Wyborn Carina, University of Montana - Aritree Samanta, Cleveland State University

Can leadership play a role in transforming sustainability? A study of the leadership within the "Sustainable Cleveland 2019 Initiative" - Aritree Samanta, Cleveland State University

Integrating Landscape-Scale Science with Local-Scale Decision Making: Adaptive governance in large landscape conservation in North America and Australia - Wyborn Carina, University of Montana

Ripples Across A Pond: From Conflict to Collaboration in Wallowa County Oregon and Beyond - Michael Jones, International Union for the Conservation of Nature Commission on Ecosystem Management

SESSION 169 - JOFFRE 1-5



Ecosystem change and society in southern and western Africa -Raphaele Ducrot, William's Daré

Ecosystem change and society in southern and western Africa -Reinette (Oonsie) Biggs, Stockholm University, Stellenbosch University - Raphaele Ducrot, Gestion de l'Eau, Acteurs et Usages

Bridging the gap between local social networks and land management to enhance adaptive governance: the sahelian perspective of the Great Green Wall Initiative - Axel Ducourneau, Observatoire Hommes-Milieux international Tessekere

Resilience of Small Farmers Facing Global Change: The Case of the Ganzourgou Province, Plateau Central, Burkina Faso -Safietou Sanfo, Wascal - Françoise Gerard, Abigail Fallot, Martine Antona, CIRAD GREEN

**Resilient water institutions: Stability in a changing context** - Jean-Philippe Venot, Wageningen University and Research

Social Capital and Small-Scale Farmers in Zambia: An Analysis of Mobile Phone Usage - Yudai Ishimoto, Research Institute for Humanity and Nature

What kind of 'sustainability' might African Anthropogenic Dark Earths and their social and ecological context point to? - James Fraser, Lancaster Environment Center

#### Thursday, May 8, 17:00 - 18:00

**CLOSING CEREMONY - PASTEUR** 

Closing Ceremony - Conference Scientific Committee, Buzz Holling (tbc), Conference Organizing Committe

## **POSTER** DETAILS

- 1. Linking the participatory evaluation of the water system vulnerability with resilience assessment in communal aqueducts to improve their performance. Gabriela Chaves
- 2. Indicating the resilience of ecosystem services in the Hehei River Basin of China. Jinyan Zhan, Chenchen Shi, Juan Huan, State Key Laboratory of Water Environment Simulation, School of Environment, Beijing Normal University
- A Probabilistic Framework for Analyzing Long-term Resilience of Dryland Agroecosystems to Economic and Climatic Change. Patrick Lawrence, Lisa Rew, Bruce Maxwell, Land Resources

and Environmental Sciences, Montana State University

- 4. The evolution of resilience research topics and research collaborations in Ecology and Society. Garry Peterson, Stockholm Resilience Centre
- Facilitating agroecosystem resilience: study of local agricultural knowledge. Aurélie Javelle, Innovation et Développement dans l'Agriculture et l'Agro-alimentaire, INRA
- 6. The role of learning in the sustainability of an animal health system. A socio technical analysis of a long-standing research partnership in Morocco. Sophia Tazi Alami, CIRAD
- 7. Modeling Experiential Knowledge: Balancing Trade-offs in Adaptive Management of Renewable Resources. Emilie Lindkvist, Jon Norberg, Stockholm Resilience Centre
- Social Meta Model to control the participatory processes in system modelling. Michel Lample, Johanna Ballé-Béganton, Denis Bailly, AMURE-Centre de droit et d'économie de la mer
- 9. Combining traditional knowledge and scientific data to understand the vulnerability of smallholders to extreme weather events: case study of the Andean Region of Peru. Mariana Vidal Merino, Uta Berger, Institute of Forest Growth and Forest Computer Sciences-Technische Universitaet Dresden, François Jost, Diana Sietz, Wageningen University Participatory policy making in practice: simulating boundary work in water governance. Nicolas Gailliard, IRSTEA
- Community-Based Transformations Building Resilience in Rural Communities of El Salvador. Alonso Cristina, Centro Salvadoreño de Tecnología Apropiada
- 11. Typologies of socio-ecological conditions: Identification of relevant and valid patterns to support resilience building. Diana Sietz, Wageningen University, Matthias Lüdeke, Carsten Walther, Marcel Kok, Peter Janssen
- Extreme transformability. Exploring systemic responses to deal with high-end global warming scenarios.
   J. David Tabara, Global Climate Forum, Diana Mangalagiu

- 13. What resilience means in the context of a changing climate: a systematic review of climate change literature? Paulina Aldunce, Department of Resoure Management and Geography, The University of Melbourne, Department of Environmental Sciences and Natural Resources, University of Chile, Centre for Climate and Resilience Research, Katherine Indvik, Roxana Borquez, Carolina Adler, Victor Galaz
- 14. Collaborative planning for regional revitalization. Sanda Kaufman, Cleveland State University, Kathryn Hexter
- **15. Vulnerability, resilience and the wealth of regions.** Marie-Antoinette Maupertuis, Université de Corse
- 16. Norwegian youth mobilizing for transformation: The preconditions of resilient protest. Elin Selboe, Karen O'Brien, University of Oslo, Department of Sociology and Human Geography, Bronwyn Hawyard, University of Canterbury, Social and Political Sciences
- 17. The role of social relations and local power structure in managing drinking water stress after natural extreme events. Raju Sarkar, Institute of Regional Science, Joachim Vogt
- Resilience, Regimes Shifts, and Water Governance in Kenya, 1900-2013: Towards a Polycentric Order.
   Camille Washington-Ottombre, Oberlin College, Daniel Cole, Liz Baldwin, Indiana University
- Internalization of negative feedback of Resource Consumption by Farming Community - Observations from Semi arid region of Southern India. Lenin Babu Kamepalli, Chandana Prathipatti, Center for Resource Management Studies
- 20. Scenario Mapping: Collaborating for Transformation in North America and Indonesia. Gregory Hill, University of Portland, Institute for Culture and Ecology
- Transformation Need, Practice and Reality in Changing Social-ecological system.
   Ronju Ahammad, Community Based Adaptation to Climate Change through Coastal Afforestation Project, Panna Husnain
- 22. Development of a boundary object through geospatial modeling and system dynamics: solving the conflict of loggerhead sea turtle bycatch in Gulf of Ulloa, Mexico. Luis A. Bojórquez-Tapia, Laboratorio Nacional de Ciencias de la Sostenibilidad, Fernanda Contreras, Michiko Amemiya, Daniela Pedroza, Antonio Díaz de León, German Ponce, Daniel Luch-Belda
- 23. Evaluating sustainability of urbanization in China with Data Envelopment Analysis. Chunyang He, Center for Human-Environment System Sustainability, State Key Laboratory of Earth Surface Processes and Resource Ecology, Qun Ma, College of Resources Science & Technology
- 24. Modeling the economic vulnerability of aquaculture under a System Approach Framework. The case of the shellfish farming in Thau Iagoon, France.

José A. Pérez Agúdez, Marine Economics Unit, IFREMER, Michel Lample, Eden Yimam, Pascal Raux,

## **POSTER** DETAILS

- - 25. The Damages from Climatic Extremes: Do Disaster Specific and Generic Adaptation Measures Matter? Chandra Bahinipati, Unesh Pattnaik, Gujarat Institute of Development Research
  - 26. Enhancing climate resilience and food & nutrition security. Sandrine Roussy, Action Contre la Faim
  - 27. When life goes back to normal: health and adaptation in the Brazilian Amazon frontier.

Marla Weihs. Departamento de Ciências Biológicas. Universidade do Estado de Mato Grosso, Centro de Desenvolvimento Sustentável, Universidade de Brasília, CAPES Foundation, Ministry of Education of Brazil, Doris Sayago, Centro de Desenvolvimento Sustentável, Universidade de Brasília, Jean-François Tourrand, CIRAD

- 28. Resilience perspectives on the new Dutch flood risk management policy Multi-Layer Safety. Mathijs van Vliet, Wageningen University, Public Administration and Policy group
- 29. Using retrospective analysis to strengthen resilience in volcanic areas. Anna Hicks, Jenni Barclay, School of Environmental Sciences,

STREVA Team

30. Exploring futures of ecosystem services in cultural landscapes through participatory scenario development in the Swabian Alb, Germany. Tobias Plieninger, University of Copenhagen

31. Resilience based ecological model for communication and management of ecosystem services' system associated with the fisheries of the Magdalena River (Colombia) catfish

Pseudoplatystoma magdaleniatum. Lorena Franco, Sandra Hernández, Mauricio Valderrama, Gustavo Polo, Carlos Barreto Fundación Humedales, Fredy Salas, Fundación Bosques y Humedales, Juan Carlos Alonso, Mauricio Carrillo, Universidad Sur Colombiana, Germán Andrade, Universidad de los Andes, Facultad de Administración

32. Ecosystem services' tradeoffs and management guidelines for a resilient industrial agriculture in the Colombian Upland Savanna Ecosystems.

Germán Andrade, Universidad de los Andes, Facultad de Administración, Professor (UASOM)

33. The value of place-based research in ecosystem service assessments.

Berta Martín-López, Universidad Autonoma de Madrid

- 34. Land Use, Agroecosystem Services and Resilience. Xiangzheng Deng, Center for Chinese Agricultural Policy, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
- 35. Many voices of Manukau: using ecosystem services to increase social capacity in coastal New Zealand. Kathryn Davies, Karen Fisher, Mark Dickson, Richard LeHeron, The University of Auckland, Simon Thrush, The University of Auckland, National Institute Of Water & Atmospheric Research
- 36. Enhancing the resilience of ecosystem services in agricultural landscapes. Megan Meacham, Stockholm Resilience Centre

- 37. Effects of payment schemes on collective action. Veronika Chobotova, Slovak academy of sciences
- 38. How does resilience framing influence effective policy implementation? Jennifer Williams, University of St. Andrews
- 39. Nicaraguan's localized agricultural cooperative network: The basis for resilient localized socio-ecological systems. Renaud Metereau, Catherine Figuiere, Centre de Recherche en Economie de Grenoble
- 40. Stakeholder participation key for building resilience: positive and dangerous implications of divergent frames. Paulina Aldunce, Department of Resoure Management and Geography, The University of Melbourne, Department of Environmental Sciences and Natural Resources, University of Chile, Centre for Climate and Resilience Research, Ruth Beilin, John Handmer, Mark Howden
- 41. Enabling and enacting practical action for wicked problems: the case of managing non-point source pollution for waterway health in catchments. James Patterson, Jennifer Bellamy, Carl Smith, University of Queensland
- 42. Beyond Boom and Bust: Improving Community Resilience in Rural Ghana. Gregg Walker, Oregon State University, Paul Sarfo Mensah,

Kwame Nkrumah University of Science and Technology, Jens Emborg, University of Copenhagen, Steve Daniels, Utah State University

- 43. Tele-tenure: Resilient Local Expression of Economic **Globalization?** Ariane de Bremond, University of Maryland
- 44. Needs for institutional transformations for managing freshwater and agriculture in South of Cordoba (Argentina). Monica b. Wehbe, National University of Rio Cuarto, Argentina
- 45. The Institutional Arrangements of Barren Ground Caribou Management - A Case Study in Social-Ecological Resilience? Brenda Parlee, University of Alberta, Canada
- 46. Utilizing Knowledge Resources on Adaptation to Climate Change: Weather Insurance as an Institutional Tool for **Promoting Community Resilience.** Masaru Yarime, University of Tokyo
- 47. Addressing common pool resource constraints via cooperative institutions: Insights from sector level technology roadmapping. Elliott More, Robert Phaal, David Probert, Institute for Manufacturing
- 48. Corporate Responsibility to Ecological Resilience -What do Stakeholder Expect ? Bonela Sandhya Sri, Dept. of Botany, Mrs. Avn college, Mulakalapalli Prasad Satya Venkat, Gitam Institute Of Management, Gitam University

## **POSTER** DETAILS

49. Experiences on community-based biodiversity management: towards landscape resilience through social learning in Colombia.

Sandra Liliana Mosquera, Instituto Alexander von Humboldt, Sebastian Restrepo

50. Adaptive elements of the newly developed Integrated Biodiversity Impact Assessment (IBIA) methodology developed in Ireland.

Tamara Hochstrasser, John Fry, University College Dublin, Ainhoa Gonzalez, Trinity College Dublin

51. Collective sharing of socio-ecological interdependencies in a Natural Regional Park project.

Leita Tschanz, Thierry Tatoni, Mediterranean Institute of marine and terrestrial Biodiversity and Ecology, Jean Jacques Brun, IRSTEA, Pierre Pech, University of Paris I Panthéon-Sorbonne

- 52. What futures for the Amazonian floodplains? A participatory prospective approach of a biodiversity hotspot under economic and climate change. Gustavo Melo, Programa EICOS/IP e INCT/PPED, Emilie Coudel, CIRAD Green, Embrapa Amazônia Oriental, Pierre Bommel, CIRAD Green, Pontifical Catholic University of Rio de Janeiro
- 53. The role of collaborative art practice for a common design of management strategies in protected areas. Berta Martín-López, Universidad Autonoma de Madrid, Ignacio Palomo, César López, Carlos Montes
- 54. Risk and Resilience in the inshore fishing sector Insights from New Brunswick, Canada and South Africa coastal communities.

Liz Wilson (Muaror), Dalhousie University

55. Toward robust regional governance for resilient coastal marine social ecological systems: A case study from Spermonde Archipelago.

Philipp Gorris, Marion Glaser, Leibniz Center for Tropical Marine Ecology, Rijal Idrus, Andi Yusuf, Research and Development Center for Marine, Coastal and Small Islands

56. Learning about an old technology: fallow-based agriculture in Brazilian Amazon.

Thiago Morello, Socioenvironmental Economics Research Center, Marie-Gabrielle Piketty, CIRAD, Toby Gardner, University of Cambridge, Luke Parry, Jos Barlow, Lancaster University, Joice Ferreira, Embrapa Amazonia Oriental

57. Can resilience thinking help manage the natural resources of the Western Australian Wheatbelt?

Elizabeth Kington, Wheatbelt Natural Resource Management Inc., Matt Giraudo.

58. An integrated approach to resiliency-focused food security research and policy in Kenya.

Gordon Hickey, Bernard Pelletier, Kimberly Bothi, Lutta Muhammad, McGill University

59. Building Resilient Livelihoods in Northern Kenya: Coping with Climate Change and Environmental Degradation. Amy Quandt, University of Colorado at Boulder

- 60. Adapting to complexity and uncertainty: vulnerability and robustness of forest commons. Tatiana Kluvankova-Oravska, CE SPECTRA, Slovak University of Technology and Institute of Forest Ecology, SAS, CETIP Network, Veronika Chobotova
- 61. Riparian forests restoration with rural communities: an interdisciplinary approach to increase the resilience of social-ecological systems.

Guillaume Rousseau, Marcelo Zelerayán, Stefania Triana, Emanoel Moura, Agroecology Graduate Program, State University of Maranhão, Danielle Celentano, Amazonian Network for Biodiversity and Biotechnology Graduate Program, State University of Maranhao, Elivaldo Oliveira, Biodiversity and Conservation Graduate Program, Federal University of Maranhao

- 62. Governing for resilience: embedding knowledge and learning in a densifying social-ecological urban system. Rachna Lévêque, University College London, Happold Consulting
- 63. Linking critical patterns of green water flows to ecological connectivty: The case of a rapidly urbanizing area of Western Canada. Pablo Pina Poujol, Mary-Ellen Tyler, University of Calgary, Michael Quinn, Mount Royal University
- 64. Informality and Resilience in Cape Town, South Africa. Lucy Rodina, Institute for Resources, Environment and Sustainability at the University of British Columbia
- 65. Applying the Urban Climate Resilience Framework. Phong Tran, Institute for Social and Environmental Transition

## Panel on Resilience and Development: Mobilising for Transformation

Opening Ceremony moderated by François BOUSQUET, Head of Resilience Alliance network French node

Monday, May 5, 9:00-11:00, Pasteur Amphitheatre

The invited speakers of this high-level panel are world leading in defining and implementing resilience thinking in current policy for development, at governmental and intergovernmental level.

During the panel discussion they will explain why and how they use the resilience concept and what they expect from scientists in this field, and more specifically from "Resilience 2014".

Brian Walker, president of the Resilience Alliance board, will contribute to the discussion with reflections on the social-ecological resilience research frontiers related to development issues.

## Participants

Brian WALKER



President of the Resilience Alliance Board

H.E. Ambassador Mahboub MAALIM



Executive Secretary of Intergovernmental Authority on Development, Horn of Africa

Jean-Pierre HALKIN



Head of Unit on Rural Development, Food Security, Nutrition, Directorate General for Development and Cooperation -EuropeAid

Jean-Marc CHÂTAIGNER



Directeur général adjoint de la Mondialisation, du Développement et des Partenariats, French Ministry of Foreign Affairs





Head of Unit Humanitarian Aid and Civil Protection ECHO.B.3 -East, West and Southern Africa, Indian Ocean

## What is progress in resilience science?

Plenary dialogue moderated by H.E. Ambassador Mahboub MAALIM, Executive Secretary of Intergovernmental Authority on Development, Horn of Africa

Tuesday, May 6, 8:30-10:00, Pasteur Amphitheatre

Luca Alinovi and Neil Adger have both contributed to resilience science in the analysis of social dynamics of resilience under environmental change, building on Buzz Holling's core ideas. Neil Adger, along with collaborators in the Resilience Alliance, has promoted analysis of social resilience, adaptive capacity and political economy dimensions of resilience. In 2000, he published the seminal article 'Social and ecological resilience: are they related?'. Luca Alinovi, who is member of the Food Security Information Network, has been promoting the adoption of the concept of household economic resilience in development programmes and he developed analytical methodologies to measure how livelihoods strategies contribute to households resilience to food insecurity.

From their two perspectives, Luca Alinovi and Neil Adger will discuss the frontiers of analysis of social and ecological resilience including what constitutes conceptual and methodological advance.



### Dr. Luca ALINOVI

is the Deputy Strategic Objective Coordinator for Resilience as well as the Representative in Kenya of the Food and Agriculture Organization of the United Nations.

Previously, Luca Alinovi

served as a senior Economist, of the Agricultural and Development Economics Division of the Food and Agriculture Organization of the United Nations.

He has led and managed programmes and leading research on food security and agriculture policy analysis in protracted crisis for the last 25 years, both in headquarters and in Eastern and Western African countries.



#### Pr. Neil ADGER

is a Professor in Human Geography at the University of Exeter, UK.

Neil Adger is a member of the Resilience Alliance, a global network of leading scientists and social scientists working on theory

and practice of resilience of social-ecological systems for sustainability.

He served as a Lead Author in the Millennium Ecosystem Assessment and in the recent Fifth Assessment of the IPCC, leading the chapter on human security.

He presently works on how people adapt and thrive in the face of environmental risk, how they move, and how they build resilience.

# Which development pathways within planetary boundaries?

Plenary dialogue moderated by Denis MEADOWS, Emeritus Professor of Systems Management, at the University of New Hampshire)

Wednesday, May 7, 8:30-10:00, Pasteur Amphitheatre

For the last two years scholars have been debating and advancing the concept of planetary boundaries and its implications for human development in the Anthropocene. After the famous Nature paper on Planetary boundaries by Johan Rockström and co-authors, Melissa Leach raised questions about their political implications: whose agendas are at stake? Could this scientific concept usher in a new era of 'power grabbing' in the name of environment? How can global governance for human prosperity within planetary boundaries be pursued in a safe and fair way?

Amidst this debate, common publications have been produced on transforming innovation for sustainability within planetary boundaries, and on navigating pathways in the safe and just space for humanity. The concept of social and planetary boundaries, integrated with a three "Ds" agenda – direction, diversity and distribution – provides a framework which can be used to identify alternative pathways and inform consideration of their social and political implications.

During this plenary dialogue J. Rockström and M. Leach will present recent advances on these concepts. They will also present the implications of this new paradigm for addressing challenges of resilience and development. Political questions remain: Whose boundaries? Whose goals? Which types of control, by whom and at what scale? What are the implications of the ideas of boundaries for notions of progress, adaptation and transformation?



#### Melissa LEACH

has just been appointed Director of the Institute of Development Studies (IDS) at the University of Sussex.

Over the last thirty years she has been closely involved both in ethnographic fieldwork, speaking four African languages, and in extensive interdisciplinary research.

This has engaged anthropology with historical, ecological and science and technology studies approaches, as well as working with foresters, agricultural and medical scientists.

Her work and numerous book and journal publications have forwarded new perspectives in areas ranging from the anthropology of environment and development; gender-environment relations; environmental history and discourse; the politics of environmental and health policy processes, society-ecology-disease interactions, and 'green grabbing'. She serves on a number of international boards, including vice-chairing the Science Committee of Future Earth.



#### Johan ROCKSTRÖM

is a Professor in Environmental Science with emphasis on water resources and global Sustainability at Stockholm University, and the Executive Director of Stockholm Resilience Centre.

He is a leading scientist on global water resources, and strategies

to build resilience in water scarce regions of the world, with more than 15 years experience from applied water research in tropical regions.

He was the Executive Director of the Stockholm Environment Institute (SEI) during 2004-2012, and co-chaired the design phase of Future Earth. He currently chairs the Arctic Resilience Assessment of the Arctic Council, the Advisory Board of the EAT forum on food, health and sustainability, and the Steering Committee of the Water, Land Ecosystem program of the CGIAR.

He is also a member of the Leadership Council of the Sustainable Development Solutions Network of the United Nations, the Earth League and a member of the Resilience Alliance.

## Marine social and ecological systems between global stewardship and community management

Plenary dialogue moderated by Allioune KANE, Professor University Cheikh Anta Diop, Dakar, Senegal

Thursday, May 8, 8:30-10:00, Pasteur Amphitheatre

Fikret Berkes and Terry Hughes, both having longstanding relationships with Resilience Alliance, have been working for many years on marine systems. While Terry Hughes is a leading scientist on the global adaptations and transformation of marine ecosystems, Fikret Berkes is a leading scholar on fishing communities.

The plenary will discuss marine social-ecological systems from two perspectives, one at the global scale focusing on ecosystems, the other at the local level and focusing on communities and the human dimension. To what extent are these perspectives complementary, and what are the advantages and challenges in using or operationalizing both of these perspectives? The dialogue between the two panelists will focus on the issues of management scales and the integration of ecological science and local/traditional knowledge.



#### **Fikret BERKES**

is Distinguished Professor and Canada Research Chair in Community-Based Resource Management, Natural Resources Institute, University of Manitoba, Winnipeg, Canada.

Fikret Berkes is an applied ecologist by background and

works at the interface of natural and social sciences. He has devoted most of his professional life to investigating the relations between societies and their resources, and to examining the conditions under which the "tragedy of the commons" may be avoided. He works on theoretical and practical aspects of community-based management, commons, and traditional knowledge.

He has some 200 peer-reviewed publications, and is the author or co-editor of nine books, including Sacred Ecology (Routledge, third edition, 2012), Navigating Social-Ecological Systems (Cambridge University Press, 2003), and Linking Social and Ecological Systems (Cambridge University Press, 1998).



Terry HUGHES,

Distinguished Professor,

is an Australian Research Council (ARC) Laureate Fellow, based at James Cook University (JCU) and Director of the ARC Centre of Excellence for Coral Reef Studies. He is an elected Follow of the Australian

Academy of Sciences since 2001.

During his career he has lived in Australia, the USA and Ireland. His research focuses on the linkages between marine ecosystems, particularly coral reefs, and the goods and services they provide to people. The objective is to understand how and why ecosystems change, in order to help improve the governance and management of natural systems and enhance their capacity to sustain human and natural capital. The overarching goal of his research is to integrate the science of coral reef resilience with decision-making and management.

Terry Hughes has undertaken research on the ecology and management of marine systems in many countries, particularly Australia, in the Caribbean, the Coral Triangle, and across the Pacific.

## ARTS AND SCIENCES

Each day, various events and workshops will offer participants an artistic perspective on the resilience of social-ecological systems, through circus, dance, music, photography and "relational aesthetics".

## **PHOTOGRAPHY**

By the photography group **Transit** (based in Montpellier, France)

Both exhibitions (*D'rives, entre France et Sénégal* and *News from Gazistan*) Monday, May 5, 14:00-18:00 Tuesday, May 6, 9:00-12:00 / 14:00-18:00 Wednesday May 7, 9:00-18:00 *Maison des Relations Internationales* - Public Event

**D'rives, entre France et Sénégal** on the vulnerability of the French and Senegalese coasts as a result of climate change, through a dual look at the two countries – The photographer **Bastien DEFIVES** build this exhibition with a group of Senegalese and French researchers that participate to the Coastal off-site session on Monday May 5. The photos are inspired and express themes and processes that are discussed in the off-site session.



**News from Gazistan** by the photographer **Alexa BRUNET**, presenting a possible picture of what may happen if shale gas were to be extracted in the Region of Languedoc Roussillon.



## **RELATION AESTHETICS**

## By Nadine Soubeyran

(based in Montpellier, France)

### What feeds resilience?

From starvation to over production, from anorexia to bulimia, from mad cows to genetically modified organisms, and from "haute cuisine" to junk food - what kind of relations to the nature that feeds us does modern man produce and reproduce. This question raises another one, which maybe is more profound: **"How do we eat without losing our humanity?"** Here, art is used as the point of entry to explore these questions.

### Travel through the landscapes of Musée Fabre

Tuesday, May 6 to Thursday May 8, 11:30-12:30 and 14:30-15:30 (Registration required), Musée Fabre

This is a voyage through the collections at Musée Fabre in Montpellier, on the theme "man-nature relations in landscape painting": the Dutch XVIth and XVIIth century landscape, the XVIIth century classical (or ideal) landscape, the XIXth century neo-classical landscape, the romantic landscape, and the landscape as interpreted by the impressionists. *This takes about 45 minutes.* 

## Workshop on "Landscapes of scents and smell"

Tuesday, May 6, 14:30-15:30 Wednesday, May 7, 15:40-16:40 Thursday, May 8, 14:30-15:30 (for those who have done the morning visit of the Museum), *Joffre E, Corum Center* 

In this workshop, you experiment with different scents and colors to translate some of the landscapes you have seen into "olfactory landscapes", that is landscapes of scents and smell. You ask ourselves whether it is possible to move beyond the visual and uncover the "olfactory identities" of different societies, regions, and even countries. *The workshop takes about 45 minutes*.

### Bar of all flavors

Tuesday, May 6 to Thursday, May 8, 17:30 – 19:00, Antigone 2, Corum Center

Take part of a "plastic proposal" to reflect on our contemporary food and food habits. The "Bar of all flavors" will be the place to experience the taste of some of our foods threatened by extinction today.

## CIRCUS

## By the Company Lonely Circus (based in Balaruc-les-Bains artistic residency, France)

This contemporary circus company has created performances mixing theatre, circus and music since 1999 (http://lonelycircusweb.free.fr/).



## Fall, Fell, Fallen

Tuesday May 6, 12:45 – 13:30, Pasteur amphitheater, Corum Center The musical art of falling – a true artistic collaboration between **Jérôme HOFFMANN** and **Sébastien LE GUEN**. The performance is based on the relationship between both artists, and integrates sound and movement with invented musical instruments and falling structures. A dialogue about time, humor and balance.



Thursday May 8, 12:45-13:30, Public Event, Esplanade Charles de Gaulle The title of this performance means "the weight of the skin". This alludes to the expression "to risk your skin".For this performance, the unique iconic 'Girafon' is used, which is a tight-rope that see-saws and rotates horizontally. The Girafon is wired for sounds, played together with recorded loops.

## DANCE

by the Company **Play** (based in Montpellier, France) Play is a live art and dance company directed by the French-American choreographer **Michèle Murray** (http://houseofplay.org/).



## **Studies for Atlas**

Wednesday May 7, 10:00-10:20 & 16:40-17:10, Antigone 2, Corum Centre This live art performance deals with the topics of transformation, adaptation and development. Five to seven performers oscillate between theatrical expressions and "dance scores", between narration and abstraction, and between movement andmotionnessless. By inventing different bodies, moving identities and evolving communities, they create a choreography where the concept of resilience is applied to dance. Multiplying visions and shifting meaning: "Studies for Atlas" are the first studies for a kaleidoscope of our moving world.

## MUSIC By K. la Luna and Android M (based in Waterloo, Canada)



## Post normal music

Wednesday May 7, 22:30-23:00, Domaines des Moures

In this performance, the artists invoke the dramatic changes occurring in the environment and our connection to it. Musically and lyrically, their compositions elicit forms and movement of water; some examples include melting glaciers, waterfalls, loon calls and port towns.

Post-Normal is passionate about advancing the artistic response to environmental change and wants to contribute to bringing aesthetics into how society navigates complex social-environmental changes.

## **RESILIENCE PLAZA** An opportunity to experience games related to natural resources management with the general public

## Wednesday, May 7, 13:00 - 15:30

If the weather is nice, the *Resilience Plaza* event will be held outside, nearby the entrance of the Corum conference center, to invite the general public to join conference participants. In case of bad weather, it will be held in the "Salon du Belvédère".



Like all distributed simulation tools, games have the ability to rapidly generate complex interactions and dynamics between decision centers that can reflect – sometimes in a stylized way – the actual reality of some social-ecological systems. Usually, games constitute very specific settings, out of time and out of context, where players and games are supposed to be disconnected from current contingencies. Hence, after a session, participants have the opportunity to

disqualify their behavioral patterns exhibited during the game: "It was just a game." Still, games can temporarily create a space for "potential realities." When the game stops, during the debriefing, the relation to the real world might be debated and collective learning might be explicitly acknowledged.

Resilience Plaza will offer you the possibility to test a few games that some of the participants in the conference have designed. With imperfect information, under time pressure, and with the outcome of your decision being strongly influenced by the decisions of the other players – will you be able to work your way through the common-pool resource dilemma you are going to face?

## THEATER FORUM - On Resilience and Development

Wednesday, May 7, 15:40-16:40, Salon du Belvédère



Augusto Boal created the "Theatre of the Oppressed", also called Forum Theater, as a forum for teaching people how to change their world. In this process a small performance is played on a given problem or issue which involves the interaction between different players. The audience would suggest different actions for the actors to carry out on-stage in an attempt to change the outcome of what they were seeing. This was an attempt to undo the traditional partition between actor and spectator and actively bring members of the audience into the performance, to give their input into

the dramatic action they were watching. For the past five years, scholars in Montpellier have been practicing Forum Theater on research and development issues. A specific scene has been created for the conference with the collaboration of Mouhamadou Diol, director of the KADDU YARAAX Association in Dakar, Senegal.



## PLACES OF INTEREST RESILIENCE 2014





Mercure Montpellier Centre \*\*\*\*



Grand Hôtel du Midi \*\*\*\*



Ibis Montpellier Centre \*\*\*

bis Montpellier C
L'Hôtel \*\*
Hôtel Kyriad\*\*

Conference Sites

Food and drink areas

Resilience2014

PLACES OF INTEREST

## **GENERAL** INFORMATION

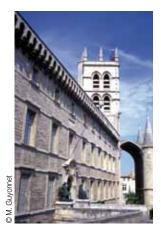
## THE SITES OF THE CONFERENCE

The Conference will take place in five different sites next to each other:

- Le Corum
- La Maison des relations internationales (MRI)
- L'Esplanade
- Le Salon du Belvédère
- Le musée Fabre

You can find the location of these sites in the map page 51 of this program

## MONTPELLIER



Montpellier has over the past decades become a major hub for research on environment and development issues. It is part of the "Global Partnership on Cities and Biodiversity" of the CBD, and hosts (among other things) the French "Excellency Laboratory" of AGRO LABEX, which brings together different prominent research groups working on agricultural sciences and sustainable development, and the secretary for the Consultative Group on International Agricultural Research (CGIAR).

But it is also one of oldest University cities in France (XIII Century). It is located on hilly ground 10 kilometers inland from the Mediterranean Sea coast on the banks of the river Lez. The medieval center, "the Ecusson", gives to the city its unique and intimate feeling.

## LOCAL TRANSPORTATION (http://www.tam-voyages.com/)

## Tramway & buses

Tickets can be bought in the automatic distributors available at each tramway station. The tramway "ligne 1", decorated in blue with white swallows, connects the northern part of the city with the Odysseum terminal on the southeast side. The "ligne 2", decorated in a flower-power theme, goes from east to west. The colorful "ligne 3", designed by the famous fashion designer Christian Lacroix, goes from west to east, arriving near the seaside at Perols. From there, you can rent a bike or take a short walk (around 20 minutes) to get to the beach. The golden "ligne 4", also designed by Christian Lacroix, serves only downtown. Some 30 bus lines are connected to the tramway lines to offer a comprehensive network that will transport you around Montpellier.

## Vélomagg bicycle service

To take full advantage of the beautiful weather, stop by one of the city's numerous bike stations and pick up a bike! You'll feel truly free meandering through town and along 150 km of bicycle paths. You can buy tickets at the Esplanade bike station (next to Montpellier Tourist Office)



## RESTAURANTS

A large variety of restaurants, cafés and bars can be found all over Montpellier, with a very large selection available at walking distance from the Corum. Some of them are open late at night. Prices for a menu usually start from  $12 \notin$  at lunch and  $18 \notin$  for dinner.

## **GENERAL** INFORMATION

## **GETTING AROUND**

Montpellier is the ideal place to stay and take advantage of both the seashore of Southern France and the many hidden treasures in the hinterlands of the Languedoc-Roussillon region. Discover major UNESCO World Heritage Sites, scenic villages and landscapes, and vast natural areas such as the Camargue marshland, and the Cévennes mountains.

## NATURAL SITES

Camargue marshes, with pink flamingos, ranches and wild horses Cévennes mountains, great by bike or on foot. Pyrénées mountains, between Spain, Andorra and Ariège



## HISTORIC CITIES

Nîmes, living Roman history (45 kms from Montpellier) Sète,the fascinating birthplace of the famous musician Georges Brassens and the poet Paul Valéry, situated between the sea and Thau Iagoon, famous for its oyster farms (30 kms) Pézenas, Molière's hometown (60 kms) Aigues-Mortes, the medieval city of Saint Louis (30 kms) Collioure, capital of Fauvism painting (190 kms)

## **UNESCO SITES**

The colossal walled city of Carcassonne, a magnificent medieval city with its ramparts, the Basilica of St Nazaire and Château Comtal

The Pont du Gard, the immense roman aqueduct

The Canal du Midi, a beautiful canal with a succession of straits, locks and tunnels

The medieval Gellone Abbey, located in the beautiful village of Saint-Guilhem-le-Désert on the route to Saint Jacques de Compostelle at the edge of the Gorges de l'Hérault.

## **SOCIAL PROGRAM**

WELCOME COCKTAIL

held at Corum Center, Antigone 2 area - Sunday 4 May, 18:00-20-00

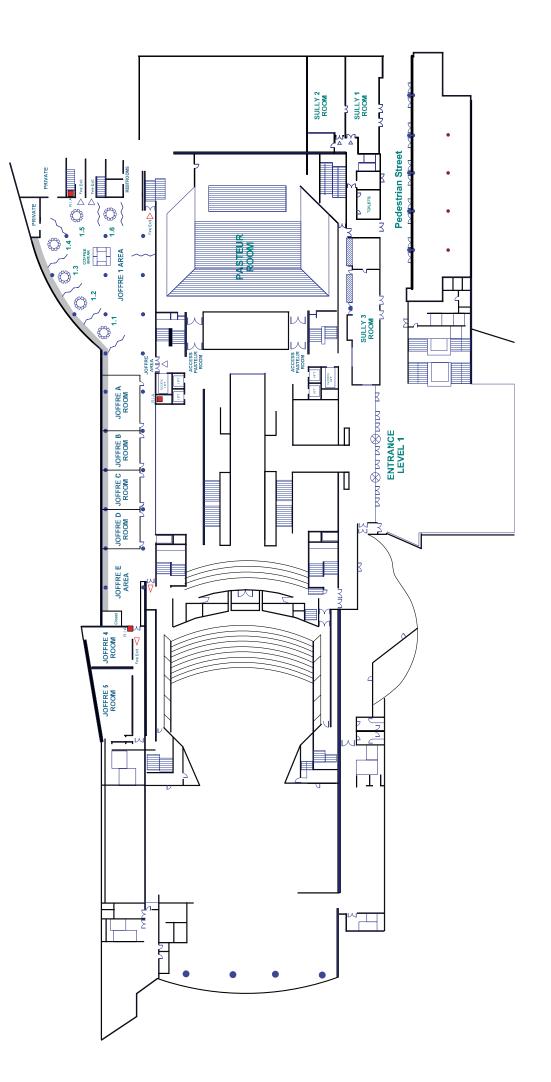


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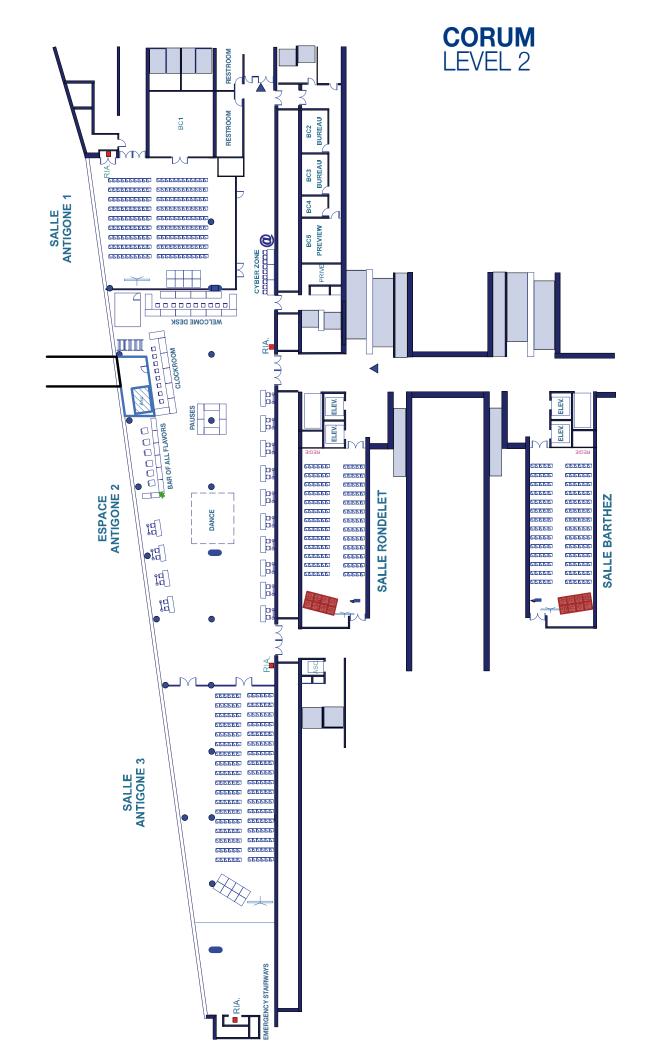
## **INSURANCE**

French health care does not cover visitors to France. Please ensure that you have a suitable insurance coverage for the event of illness or accident. The organizing committee will not accept liability for personal injuries sustained by, or for loss or damage to property belonging to, the participants.



**CORUM** LEVEL 1





## Resilience and Development: Mobilizing for Transformation



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