

















# **BIOECON XX: The 20th ANNUAL BIOECON CONFERENCE**

# Land-use, Agriculture and Biodiversity: Spatial and Temporal Issues

12-14 September 2018, Kings College, Cambridge, United Kingdom

# **FINAL PROGRAMME**

Wednesday 12 SEPTEMBER	DAY 1: THURSDAY 13 SEPTEMBER		DAY 2: FRIDAY 14 SEPTEMBER
14.00 - 19.30 REGISTRATION AND WELCOME COCKTAIL Kings College	7.45 - 8.45	Breakfast	Breakfast
	8.00 - 8.45	Registration	Checkout
	8.45 - 9.00	Welcome Address	Final Announcement
	9.00 - 10.00	Plenary Session 1	Plenary Session 2
	10.00 - 10.30	Coffee break	Coffee break
	10.30 - 12.30*	Parallel Sessions A1 - A4	Parallel Sessions D1 - D4
	12.30 - 13.30	Lunch	Lunch
	13.30 - 15.00	Parallel Sessions B1 - B4	Plenary Policy Session 2
	15.00 - 15.30	Coffee break	Coffee break
	15.30 - 17.00**	Parallel Sessions C1 - C4	Parallel Sessions E1 - E4
	17.00 - 18.30	Plenary Policy Session 1	
	18.30 - 19.30	BIOECON internal meetings	
	19.15 - 20.00	Pre-dinner Drinks	
	20.00 - 22.00	Social Dinner	
	*, **: Parallel MAVA funded workshop: Land Use Practices in the 21st Century.		

## Wednesday 12 September 2018

8:30 - 18:00 BIOECON – Osnabrück Pre-workshop on the Role of Social Preferences in Promoting Conservation Behaviour

Kings College

Due to limited seating, participation is by invitation or application only. Please send your request to <a href="mailto:elisabeth.gsottbauer@uibk.ac.at">elisabeth.gsottbauer@uibk.ac.at</a>

14:00 – 19:30 Registration Conference Office

18:00 - 19:30 Welcome Cocktail Back Lawn

## Thursday 13 September 2018

08:00 – 08:45 Registration Conference Office

08:45 – 9:00 OPENING BIOECON XX and Welcome Address: Ben GROOM

09:00 – 10:00 PLENARY SESSION 1 Keynes Hall

**Chair: Salvatore DI FALCO** 

Keynote Address

Douglas GOLLIN, University of Oxford, UK

Title: "Conserving Genetic Resources for Agriculture: Economic Implications of Emerging Science"

10:00 – 10:30 Coffee break Chetwynd Room

10:30 – 12:30: BIOECON PARALLEL WORKSHOP PART I

Keynes Hall

Land Use Conservation in the 21st Century. Population, Development and Global Public Goods

Funded by MAVA LAND USE FUTURES. Invited speakers and participants, BIOECON participants also welcome.

## Part I: Conservation in the 21st Century

Chair: Susanna HECHT

Mark WILLIAMS, Leicester University, UK Conservation in the Anthropocene Discussant - Fangyuan Hua, Cambridge University, UK

Oscar VENTER – University of North British Columbia, USA Conservation: Protected Areas and Pressures Discussant - Paul Ferraro, John Hopkins University, USA

Tim SWANSON – Graduate Institute of International Development Studies (IHEID), Switzerland Land, Population and Policy Discussant – Laura Diaz Anado, Cambridge University, UK

General Discussion with Panel

#### 10:30 - 12:30 PARALLEL SESSIONS A1 - A4

10:30 - 12:30 PARALLEL SESSION A1: Experiments and the Environment

Chair: Fabian THOMAS Keynes Seminar Room 1

Marc N. CONTE, Fordham University, UK

Information Access, Conservation Practice Choice, and Rent Seeking in Conservation Procurement Auctions: Evidence

from a Laboratory Experiment

Discussant: Justin Dijk

Justin DIJK, VU University Amsterdam, Netherlands

Analysing group contract design using a lab and a lab-in-the-field threshold public good experiment

Discussant: Mirthe Boomsma

Mirthe BOOMSMA, Universidade Federal do ABC, Brazil

Developing a green habit: Stimulating apartment building residents to sort their household waste

Discussant: Fabian Thomas

Fabian THOMAS, University of Osnabrück, Germany,

Greening the Common Agricultural Policy - Insights from a field experiment in Lower Saxony, Germany

Discussant: Marc N. Conte

## 10:30 - 12:30 PARALLEL SESSION A2 - Spatial issues in Biodiversity Conservation I

Chair: George MARBUAH

Beves Room

Ben GROOM, London School of Economics, UK

REDD+ as an area-based policy: evidence from the 2011 Moratorium on oil palm, timber and logging concessions in Indonesia Discussant: Amanda Eigner

Amanda EIGNER, Institute for Agricultural Policy and Market Research, Justus Liebig University Giessen, Germany Modelling impacts of structural changes on biodiversity through spatial land transformations based on an agronomy and policy Discussant: Matt Cole

Matt COLE, Birmingham Business School, University of Birmingham, UK

Biodiversity and Economic Land Use

Discussant: George Marbuah

George MARBUAH, Swedish University of Agricultural Sciences, Sweden

Economic Activity, Species Occurrence and Spread: Evidence from Satellite Imagery Data

Discussant: Ben Groom

## 10:30 - 12:30 PARALLEL SESSION A3 - Natural Capital: Theory

Chair: Mabel TIDBALL Saltmarsh Reception Room

Eli FENICHEL, Yale School of Forestry & Environmental Studies, USA Valuing Multiple Natural Capital Stocks Under Correlated Volatility Discussant: Martin Quaas

Martin QUAAS, Kiel University, Germany Insurance Value of Natural Capital Discussant: Tanvir Hussain

Tanvir HUSSAIN, East West University, Bangladesh

Shadow-price valuation of natural capital under different conceptions of sustainability

Discussant: Mabel Tidball

Mabel TIDBALL, French National Institute for Agricultural Research - INRA, France

Ecosystem services, ecosystem disservices, and economic development: is it always worth to conserve natural capital?

Discussant: Eli Fenichel

#### 10:30 - 12:30 PARALLEL SESSION A4 - Agriculture, Technology and Biodiversity

Chair: Carlo ORECCHIA Saltmarsh Dining Room

Chandan SINGHA, University of Delhi, India

Causal impact of the adoption of soil conservation measures on farm profit, revenue and variable cost in Darjeeling District, India

Discussant: Nicholas Tyack

Nicholas TYACK, Graduate Institute of International and Development Studies (IHEID), Switzerland Local innovators in Uganda: Experimenting with improved seeds in a low adoption environment *Discussant: Esther Estruch-Bosch* 

Esther ESTRUCH-BOSCH, Universitat de Lleida, and Universidad Pública de Navarra, Spain Protecting biodiversity on farm land: Which type of agri-environmental measure does it better? *Discussant:* Carlo *Orecchia* 

Carlo ORECCHIA, Italian Ministry of the Environment, Italy

Modelling agricultural biodiversity and land allocation in a general equilibrium framework. The case of maize and wheat in Ethiopia

Discussant: Chandan Singha

12:30 – 13:30 Lunch Dining Hall

#### 13:30-15:00: BIOECON PARALLEL WORKSHOP PART II

Keynes Hall

Land Use Conservation in the 21st Century. Population, Development and Global Public Goods,

Funded by MAVA LAND USE FUTURES. Invited speakers and participants. BIOECON participants also welcome.

Part II: Food Security and Conservation

Chair: Tim SWANSON, IHEID, Switzerland

Hans VAN MEIJL, Wageningen University, Netherlands Conservation in Long Run Discussant – Hugo Vallin, IIASA, Austria

Tamas KRISZTIN, IIASA, Austria Conservation and Food Security Discussant -- Doug Gollin, Oxford University, UK

General Discussion with Panel

#### 13:30-15:00 PARALLEL SESSIONS B1 - B4

#### 13:30-15:00 PARALLEL SESSION B1 - Public Preferences for the Environment

Chair: Thiago MORELLO Saltmarsh Reception Room

Luca PANZONE, Newcastle University, UK

Strategies to drive consistent sustainable consumption in retailing – Evidence from an online supermarket experiment *Discussant: Charles Palmer* 

Charles PALMER, London School of Economics, UK

Voter choice and issue salience: environmental preferences and the 2016 Presidential election

Discussant: Thiago Morello

Thiago MORELLO, Universidade Federal do ABC, Brazil

The effect of substitutes on preferences of Great Britain population for ecological de-intensification of agriculture Discussant: Luca Panzone

13:30 – 15.00 PARALLEL SESSION B2 – Forests I: Deforestation: Causes and Cures

Chair: Benedict PROBST Keynes Seminar Room 1

Derya KELES, Université de Lorraine and Université de Strasbourg, France

What drives the withdrawal of protected areas? Evidence from the Brazilian Amazon

Discussant: David Heres

David HERES, Centro de Investigación y Docencia Económicas, Mexico

Economic returns to land use and deforestation in Mexico between 2002-2011: An econometric model of land use transitions

Discussant: Benedict Probst

Benedict PROBST, University of Cambridge, UK

Can land rights prevent deforestation? Evidence from a large-scale titling initiative in the Brazilian Amazon

Discussant: Derya Keles

## 13:30-15:00 PARALLEL SESSION B3 - Natural Capital and Ecosystems

Chair: Moritz DRUPP

Beves Room

Saudamini DAS, Institute of Economic Growth, India

Substitutability between built capital and natural capital: Has investment in cyclone adaptation made the storm protection by mangroves redundant?

Discussant: Katrina Davis

Katrina DAVIS, ARC Centre of Excellence for Environmental Decisions, University of Queensland, Australia A generalizable integrated natural capital methodology to prioritise investment in saltmarsh enhancement *Discussant: Moritz Drupp* 

Moritz DRUPP, University of Hamburg, Germany

Inter- and Intragenerational Distribution and the Valuation of Natural Capital

Discussant: Saudamini Das

#### 13:30-15:00 PARALLEL SESSION B4 - Instruments I: Ecosystem Auctions

Chair: Patrice LOISEL Saltmarsh Dining Room

Nick HANLEY, University of Glasgow, UK Spatial Coordination and Joint Bidding in Conservation Auctions Discussant: Pengfei Liu

Pengfei LIU, University of Arkansas, Pine Bluff, USA Performance of Three Multi-Award Reverse Auction Mechanisms Discussant: Patrice Loisel

Patrice LOISEL, French National Institute for Agricultural Research - INRA, France Spatially Contiguous Land Management: a sealed bid auction format *Discussant: Nick Hanley* 

15:00 – 15:30 Coffee break Chetwynd Room

#### 15:30 - 17.00 PARALLEL SESSION C1-C4

#### 15:30 - 17.00 PARALLEL SESSION C1 - Stated Preference I: Applications

Chair: Roland OLSCHEWSKI Keynes Seminar Room 1

Adeniyi GBADEGESIN, Ladoke Akintola University of Technology, Nigeria Potential impact of Climate Change on Yields of Cereals in Nigeria *Discussant: Pierre Courtois* 

Pierre COURTOIS, French National Institute for Agricultural Research - INRA, France Accounting for spatially heterogeneous preferences while managing invasive species: a choice experiment Discussant: Roland Olschewski

Roland OLSCHEWSKI, Swiss Federal Research Institute WSL, Switzerland
Bringing the neighbors in: A choice experiment on the influence of coordination and social norms on farmers' willingness to accept agro-environmental scheme across Europe

Discussant: Adeniyi Gbadesgesin

## 15:30 - 17.00 PARALLEL SESSION C2 - Forests II: Management

Chair: Masson SOLENE Beves Room

Olli TAHVONEN, University of Helsinki, Finland Economics of mixed-species forestry with ecosystem services Discussant: Jennifer OKONKWO

Jennifer OKONKWO, Department of Economics, Kiel University, Germany Welfare Effects of Natural Resource Privatization: A Dynamic Analysis *Discussant: Solene Masson* 

Solene MASSON, Aix-Marseille University, France Environmental conservation program and poverty: evidence from the Brazilian Amazon Discussant: Olli Tahvonen

#### 15:30 - 17.00 PARALLEL SESSION C3 - Natural Resources Management I

Chair: Pauli LAPPI Saltmarsh Reception Room

Frank WÄTZOLD, Brandenburg University of Technology Cottbus-Senftenberg, Germany Ecological-economic modelling to assess the impact of organic farming on endangered grassland biodiversity *Discussant: Charles Figuières* 

Charles FIGUIERES, Aix-Marseille School of Economics, France A tale of two diversities

Discussant: Paulo Lappi

Pauli LAPPI, Euro-Mediterranean Center on Climate Change and Ca' Foscari University of Venice, Italy On the optimal extraction under asymmetric information over reclamation costs Discussant: Frank Wätzold

## 15:30 - 17.00 PARALLEL SESSION C4 - Preferences and Behaviour

Chair: Susana MOURATO Saltmarsh Dining Room

Salvatore DI FALCO, University of Geneva, Switzerland Shocks and Risk Preferences Revisted – Causal inferences from panel data versus cross-sections Discussant: Ann-Kathrin Koessler

Ann-Kathrin KOESSLER, University of Osnabrück, Germany Policies as information carriers: (Potential) perceptional and behavioral changes due to environmental policies *Discussant: Susana Mourato* 

Susana MOURATO, London School of Economics, UK
Do biodiversity conservation videos cause pro-environmental spillover effects?

Discussant: Salvatore Di Falco

## 17:00 - 18:30 Plenary Panel Session 1:

Keynes Hall

Panel title: "Lessons learned (if any?) from experimental evidence for the development of REDD+"

Chair / Moderator: Andreas Kontoleon, Cambridge University

Panelists:

Prof Julia Patricia Gordon Jones, School of Natural Sciences, Bangor University, UK

Dr Gabriela Simonet, Center for Environmental Economics of Montpellier (CEE-M), French National Institute for Agricultural Research (INRA), France and Center for International Forestry Research (CIFOR), Indonesia

Prof William Sutherland Miriam Rothschild Professor of Conservation Biology, Department of Zoology

University of Cambridge, UK

Dr Sven Wunder, Principal Scientist European Forest Institute (EFI) - Barcelona Office, Spain

#### 18:30 - 19:30 BIOECON PARTNER MEETINGS

## **Scientific and Institutional Partners Meeting**

Beves Room

19:15-20:00 Pre-Dinner Drinks Back Lawn

## 20:00 - 22:00 CONFERENCE SOCIAL DINNER

Dining Hall

# Friday 14 September 2018

08:45 – 9:00 Final Announcements: **Ben GROOM**Keynes Hall

9:00 - 10:00 PLENARY SESSION 2

Keynes Hall

Chair: Andreas KONTOLEON

Keynote Address

Prof. Paul Ferraro, John Hopkins University, USA

Title: "Applying Behavioral Economics to Improve Environmental Programs: knowns and unknowns."

10:00 – 10:30 Coffee break Chetwynd Room

10:30 - 12:30 PARALLEL SESSIONS D1 - D4

10:30 - 12:30 PARALLEL SESSION D1 - Instruments II: PES and Ecosystem Services

Chair: Nick HANLEY Beves Room

Matthias BOESCH, Thünen Institute of International Forestry and Forest Economics, Germany Why do payments for watershed services emerge? A cross-country analysis of adoption contexts *Discussant: Katsuya Tanaka* 

Katsuya TANAKA, Research Center for Sustainability and Environment, Shiga University, Japan Predicting Farmers' Responses to Flexible Bonus-based Agri-Environmental Payments: Empirical Findings from Rice Farming in Japan Discussant: Anca Voia

Anca VOIA, Toulouse School of Economics, France
Are Conservation Programs Additional? Evidence from the French Grassland Conservation Program
Discussant: Nick Hanley

Nick HANLEY, University of Glasgow, UK

How best to pay landowners to control invasive species? Evidence from disease control programs in Finland Discussant: Matthias Boesch

10:30 - 12:30 PARALLEL SESSION D2 - Stated Preferences II: Applications and Methods

Chair: Jonathan QUARTEY Saltmarsh Reception Room

Marije SCHAAFSMA, University of Southampton, UK Guidance for Deliberative Monetary Valuation studies *Discussant: Maria Loureiro* 

Maria LOUREIRO, University of Santiago de Compostela, Spain Assessing preferences for wildfire prevention policies in Spain Discussant: Thiago MORELLO

Thiago MORELLO, Universidade Federal do ABC, Brazil

Fire, tractors and health in the Amazon: incorporating heterogeneous preferences into the Hicks-Kaldor Discussant: Jonathan Quartey

Jonathan QUARTEY, Kwame Nkrumah University of Science and Technology, Ghana

Harnessing local community preferences for biodiversity conservation in developing countries: Evidence from Ghana's

lake Bosomtwe basin

Discussant: Marije Schaafsma

#### 10:30 - 12:30 PARALLEL SPECIAL SESSION D3 - Spatial Issues in Biodiversity Conservation II

Chair: Paula CULLEN Keynes Hall

Jasper MEYA, Humboldt-Universität zu Berlin, Germany Structural benefit transfer and spatial distribution of environmental local public goods Discussant: Maksym Polyakov

Maksym POLYAKOV, Centre for Environmental Economics and Policy, The University of Western Australia, Australia Joining the dots versus growing the blobs: optimal spatial targeting of ecological restoration Discussant: Zachary Turk

Zachary TURK, London School of Economics, UK Localized pollutants and the use of clustering and dispersion as abatement strategies Discussant: Paula Cullen

Paula CULLEN, Agriculture and Food Development Authority - TEAGASC, Ireland Agri-environment scheme design and public goods: spatial match or mismatch *Discussant: Jasper Meya* 

### 10:30 - 12.30 PARALLEL SESSION D4 - Natural Resources Management II: Wildlife and Endangered Species

Chair: Nir Becker Saltmarsh Dining Room

Michael 'T SAS-ROLFES, University of Oxford, UK Can a legal horn trade save rhinos?

Discussant: Katherine Needham

Katherine NEEDHAM, University of Glasgow Designing Markets for Biodiversity Offsets: Lessons from Tradable Pollution Permits Discussant: Anders Skonhoft

Anders SKONHOFT, Norwegian University of Science and Technology, Norway Regulation of Moose Hunting in Scandinavia: The Implications of Age-Structured Models *Discussant: Nir Becker* 

Nir BECKER, Tel Hai Academic College, Israel Shark tourism: Opportunities and challenges of an emerging phenomenon Discussant: Michael 't Sas-Rolfes

12:30 – 13:30 Lunch *Dining Hall* 

13:30 - 15.00 Plenary Session 2:

Keynes Hall

Panel title: "Resilience, Natural Disasters and Insurance for Ecosystems"

Chair/Moderator: Julia Touza, University of York

Panelists:

Dr Daniel Clarke, Centre for Global Disaster Protection, Department for International Development

Dr Richard Bretton, University of Bristol

Dr Swenja Surminski, London School of Economics & Vivideconomics

15:00 – 15:30 Coffee break Chetwynd Room

15:30 - 17:00 PARALLEL SESSIONS E1-E4

15:30 - 17:00 PARALLEL SESSION E1 - International Environmental Agreements

Chair: Hans-Peter WEIKARD Beves Room

Nils DROSTE, Lund University, Sweden Designing a global mechanism for intergovernmental biodiversity financing Discussant: Rüdiger Pethig

Rüdiger PETHIG, University of Siegen, Germany Self-enforcing biodiversity agreements with financial support from North to South Discussant: Hans-Peter Weikard

Hans-Peter WEIKARD, Wageningen University, Netherlands
Does certification improve fisheries governance? The case of MSC certification of Western Central Pacific Tuna
Discussant: Nils Droste

#### 15:30 - 17:00 PARALLEL SESSION E2 - Climate Change and the Environment

Chair: Adrien LAGARDE Keynes Seminar Room 1

Anke LEROUX, Monash University, Australia Coastal Dynamics and Adaptation to Uncertain Sea Level Rise: Optimal Portfolios for Salt Marsh Migration Discussant: Carlo Orecchia

Carlo ORECCHIA, Italian Ministry of the Environment, Italy The economic impact of soil and nutrient loss in Malawi Discussant: Adrien Lagarde

Adrien LAGARDE, University of Bordeaux, France How does MMEY mitigate bioeconomic effects of climate change for mixed fisheries Discussant: Anke Leroux

## 15:30 - 17:00 PARALLEL SESSION E3 - Game Theory Conservation and Biodiversity Management

Chair: Andrew Bate Saltmarsh Dining Room

Martin DRECHSLER, Helmholtz Centre for Environmental Research, Germany Modelling the effectiveness and permanence of a compensation payment scheme for the conservation of a public environmental good

Discussant: Adam Kleczkowski

Adam KLECZKOWSKI, University of Strathclyde, UK

Weakest-link control of invasive species: Impacts of memory, bounded rationality and network structure in repeated

cooperative games

Discussant: Martin Drechsler

Andrew BATE, University of York, UK Incentives for effective biosecurity-related assurance schemes

Discussant: TBA

#### 15:30 - 17:00 PARALLEL SESSION E4 - Issues in Inequality and the Environment

## Chair: Alejandro LOME-HURTADO

Saltmarsh Reception Room

Frank VENMANS, University of Mons, Belgium Inequality Aversion and the Environment Discussant: Rintaro Yamaguchi

Rintaro YAMAGUCHI, National Institute of Environmental Studies, Okinawa Institute of Science and Technology Graduate University, Japan Spatial Discounting of Ecosystem Services Discussant: Alejandro Lome-Hurtado

Alejandro LOME-HURTADO, University of York, UK Environmental injustice in Mexico City: A spatial-quantile approach Discussant: Frank Venmans

17:00 CONCLUSION OF BIOECON XX