



**Conference on the Science and Education of Land Use:
A transatlantic, multidisciplinary and comparative approach
The Westin Washington, DC City Center
September 24-26, 2007**



Association for European
Life Science Universities (ICA)



Conference Papers (Subject to change)

PAPER CLUSTER NO. 1: DRIVERS OF LAND USE CHANGE

Track 1 Drivers of Land Use Change: Urbanization and Agriculture

1-A Monday, 1:30-3:00 P.M.

- 1 Insights from Transatlantic Comparative Studies on Land Use and Political Driving Forces: The Example of Massachusetts, USA-Switzerland, Anna M. Hersperger and Matthias Bürgi
- 2 Comparison of Land Use Changes Due to Urban Growth in St. Louis Metropolitan Area (USA) and Greater Copenhagen Area (Denmark), Henry N.N. Bulley et al.
- 3 Settlement Patterns Surrounding US and UK Cities: The Challenge of Protecting the Countryside, A. Bruce Dotson

1-B Monday, 3:30-5:00 P.M.

- 4 Future Farmland Requirements in a Densely Populated Area: The Case of Flanders in Europe, Valerie Vandermeulen
- 5 What Drives Land-Use Changes Across the US? A Regional Analysis of Landowner Decisions, Ruben Lubowski et al.
- 6 Geography of US Peri-Urban Agricultural Adaptation, Jill Clark et al.
- 7 Urbanization Impacts on the Soil Resources in the Nanjing/Shanghai Corridor, Eric Warner et al.

1-C Tuesday, 10:30-Noon

- 8 What are the Determinants of Brownfields Regeneration? A Revealed Preference Study of England Brownfields, Alberto Longo and Danny Campbell
- 9 Employment Growth in the American Urban Hierarchy: Long Live Distance, Mark Partridge et al.

- 10 About the Validity of the Urban Monocentric Model in the Netherlands, Thomas de Graaff, Raymond J.G.M. Florax and Frank van Oort

1-D Tuesday, 1:30-3:00 P.M.

- 11 Drivers of Postsocialist Cropland Abandonment in Romania, Daniel Müller, Tobias Kuemmerle and Patrick Griffiths
- 12 Land Use Change Caused by Socioeconomic Transformation Processes. A Case Study in the Kharaa River Catchment, Mongolia, Christian Schweitzer and Joerg A. Priess
- 13 Land Use Planning, Sustainability, and Security in Terrains of Terror, Charles Geisler et al.
- 14 Tropical Land Use and Land Cover Change as Affected by Rural Immigration; A Case Study from Indonesia, Joerg A. Priess, Robert Weber, Heiko Faust and Matthias Mimler

Track 2 Drivers of Land Use Change: Modeling Methods

2-A Tuesday, 3:30-5:00 P.M.

- 15 Lessons and Challenges for Land Change Modelers as Revealed by a Comparison of Thirteen Cases, Robert Pontius et al.
- 16 Spatial Models of Land Use Change: The Role of Local Spillovers as Drivers of Open Space Loss, Richard Ready et al.
- 17 Demographic, Economic, Environmental, and Political Determinants of Irreversible Land Development in the US, Scott Templeton

2-B Wednesday, 8:30-10:00 A.M.

- 18 Predicting Urban Growth Patterns in the Coastal Southeastern United States [neural networks], Jeffery Allen and Kang Shou L
- 19 The Importance of Land Heterogeneity in Trade Liberalization Analysis [biophysical models/IMAGE-GTAP], A. Tabeau, B. Eickhout and H. van Meijl
- 20 Market Clearing in Agent-Based Models of Conversion: A Bid-Rent Function, Richard Iovanna and Colin Vance

2-C Tuesday, 1:30-3:00 P.M.

- 21 A Multi-Agent Model for Agricultural Land Use & Land Development Decisions in Rural south China, Lin Zhang and Jill Findeis
- 22 Agent-based modeling of HIV/AIDS and land-use dynamics in south-eastern Uganda, Maction Komwa, Dawn Parker, and Kathryn H. Jabonsen
- 23 Modelling Land Use Changes Using Cellular Automata. An Example from the North China Plain, Frank Bode and Reiner Doluschitz

2-D Tuesday, 3:30-5:00 P.M.

- 24 Land Use Simulation in the North China Plain Under Different Scenarios - An Integrated GIS Approach, Yunhui Liui et al.
- 25 Cooperation Costs & Intergovernmental Land Use Cooperation, Soji Adelaja and Laila Racevskis
- 26 Simulating the Diffusion of Agricultural Innovations with Multi-agent Systems: An Empirical Application to Northern Thailand, Pepijn Schreinemachers, Prasnee Tipraqsa and Thomas Berger

2-E Wednesday, 8:30-10:00 A.M.

- 27 Multiscale Processes Underlying Residential Land Conversion in Periurban Areas, Darla Munroe et al.
- 28 Multi-scale Integrated Analysis of Land Use Change, Peter H. Verburg, Koen P. Overmars, Martha Bakker and Louise Willemen
- 29 On the Rate of Land Development when Developers and Conservationists are Engaged in a Dynamic Lobbying Game, John Janmaat

PAPER CLUSTER NO. 2: LAND USE POLICY EVALUATION

Track 1 Land Use Policy Evaluation: General

3-A Monday, 1:30-3:00 P.M.

- 30 Ecological Networks to Balance Development and Conservation: Examples from Land Use Planning in the Netherlands, USA and Argentina, Hubert van Lier and Gerrit J. Carsjens
- 31 Castles or Cattle? Community Economics & Policy Alternatives in the Competition for Ranch Open Space Values, A. Seidl et al.
- 32 Hedonic Valuation of Alternative Land Protection Methods in the Rural-Urban Fringe, Robert Kling et al.
- 33 Small Feet, Big Tracks: The Potential Economic Effects of Critical Habitat Designation on the Economy of Southeastern Wyoming, Thomas Foulke, D. Taylor and R. Coupal

3-B Monday, 3:30-5:00 P.M.

- 34 The Impact of Policies on Land Use: Developing Indicators for Environmental, Social and Economic Sustainability, Tom Kuhlman
- 35 Using Market Values for Targetting Ecologically Valuable Natural Resource Land: An Application to Maryland's GreenPrint Program, Karen Palm & Lori Lynch
- 36 Evaluating Land Use Plan Quality, Berke and Godschalk
- 37 Incorporating Land Use Change and Development into Landscape Planning and Ecological Assessments in the Upper Deschutes Area, Oregon (USA), Jeff Kline & Miles Hemstrom

Track 2 Land Use Policy Evaluation: Agriculture, Multi-functionality and Agri-environmental programs

4-A Tuesday, 10:30-Noon

- 38 Policy Impacts on Farmland Values at the Urban Fringe: The Case of Ontario's Greenbelt, Brady Deaton and Richard Vyn
- 39 Using the Past to Create a Sustainable Future for Agric.: Impact of Federal Farm Policy on Environ. and Social Landscape Change in Iowa, Paul Brown & Lisa Schulte
- 40 Evaluation of Agricultural Land Preservation Programs, Lori Lynch et al.
- 41 Compliance with Standards in European Agriculture vis-à-vis Main Competitors on the World Market, Floor Brouwer and Roel Jongeneel

4-B Tuesday, 1:30-3:00 P.M.

- 42 Designing Efficient Agri-environmental Schemes Under Consideration of the Common Agricultural Policy (CAP) in Europe, Bettina Matzdorf, Klaus Müller, Christian Kersebaum, Joachim Kiesel and Thomas Kaiser
- 43 Agri-environmental Programs in the US and the EU, Nelson Bills and Christina von Haaren
- 44 Multifunctionality and Land Use Policy: An Application of Nonmarket Valuation to Urban Fringe Farm & Forest Preservation, Joshua Duke and Robert Johnston
- 45 Agri-environ. Measures as an Instrument to Enhance Sustainability-Farm Level & Budget Implications from a Case Study Region in Germany, Sandra Uthes

Track 3 C Policy - Addressing Endogeneity Issues: Goals and Preferences

5-A Tuesday, 3:30-5:00 P.M.

- 46 Measuring the Effects of Growth Controls on New Residential Development, Antonia Bento et al.
- 47 Transportation Spending & Sprawl: An Analysis of the Causal Relation in the Detroit Metropolitan Area, Annalie Campos & Soji Adelaja
- 48 From Response to Driver: Investigating the Interactions between Land Preservation and Landscape Change, James R. Myers
- 49 Economic development, paddy field loss and rice output in China, Liu Pinghui and Wu Ziping

5-B Wednesday, 8:30-10:00 A.M.

- 50 Public Preferences for Protecting Working Landscapes, Kathleen Bell
- 51 The Future of Farmland Preservation Programs: From Retention & Viability to Resiliency, Soji Adelaja et al.
- 52 Enforcing a Holistic Approach to Rural Landscape Economic Valuation as Support to Landscape Planning and Policy Making, G. Hutchinson, A. Longo, and C. Tagliafierro

PAPER CLUSTER NO. 3: CONSEQUENCES OF LAND USE CHANGE

Track 1 Consequence of Land Use Change: Agriculture, Forests and Other Ecosystems

6-A Monday, 1:30-3:00 P.M.

- 53 Urban Influence on Farmland Values and Costs of Production: The Corn Belt, the South, and the Plains States: A Farm-Level Analysis, Richard N. Nehring, Kenneth W. Erickson, and Vince Breneman
- 54 Economics of Soil Carbon Sequestration Through Biomass Crops, Madhu Khanna et al.
- 55 Human and Ecosystems Interaction and its Ecological Impacts in Mountains: Lesson from Scenario Development in Himalayas of India, S. Nautiyal and H. Kaechele

6-B Monday, 3:30-5:00 P.M.

- 56 Change of Forest Ecosystems in the Long Sweep of History: An Economic Perspective, Yaoqi Zhang

- 57 Spatially locating threats to the environmental contributions of forest land in the USA, Ronald E. McRoberts & Susan Stein

6-C Tuesday, 10:30-Noon

- 58 LCLU Change Interactions with Climate in Northern Eurasia: International Cooperation and Education Activities in the NEESPI program, Garik Gutman
- 59 Land Use Transitions, Demographic Change and Perceptions of Place: Penn State Transitional Zone Ecosystem Initiative, Jill Findeis
- 60 Land Transformation Along the Wildland Urban Interface: Analyzing Urbanization Patterns & Ecosystem Impacts on Northeast Ohio, Dudley Bonsal

Track 2 Consequences of Land Use Change: Land/Water Interactions

7-A Tuesday, 1:30-3:00 P.M.

- 61 Lake Water Quality in Maine's Changing Landscape, Megan Tylka and K. Bell
- 62 Estimating the Effects of the EU Common Agricultural Policy on Ground and Surface Water Quality: Case Study in the Neckar Basin, Thomas Gaiser and Martin Henseler
- 63 Land Use Impacts on Estuarine Areas in South Carolina and the Southeast Region, USA: An Overview, M. Richard DeVoe et al.
- 64 Managing Coastal Urbanization and Development in the 21st Century: Balancing Human Dimensions and Environmental Quality Issues, Geoffrey I. Scott et al.

7-B Tuesday, 3:30-5:00 P.M.

- 65 Linkages Between Land Cover and the Environmental Conditions in Tidal Creeks, Denise M. Sanger, A. Fred Holland
- 66 A Multi-disciplinary Approach to Modeling the Impacts of Land Use Change on Vernal Pool-breeding Amphibians, Robb Freeman
67. Forest Clearing and Soil Degradation *Rethinking the 'Cycle of Abandonment' on the Amazonian Forest Frontier*, Luke Jones and Jill L. Caviglia-Harris

7-C Wednesday, 8:30-10:00 A.M.

- 68 The Importance of Physical Processes in Land Use Planning, Jack Blanton et al.
- 69 Chemical Contaminants Entering Estuaries of the South Atlantic Bight and Determining Their Effects by Bioassays, Richard. F. Lee et al.
- 70 Land Use Policy and Flood Risk: A Comparison Between the American and Dutch Experiences, Vanessa E. Daniel, Raymond J.G.M. Florax, and Piet Rietveld
- 71 Exploring Possible Spatial Planning Scenarios in the Context of Potential Sea-level Rise in the Netherlands; Dealing with the Uncertainties of Climate Change, W. Loonen and E. Koomen

PAPER CLUSTER NO. 4: LAND USE EDUCATION, OUTREACH AND PARTICIPATION/PARTICIPATORY METHODS

8-A Monday, 1:30-3:00 P.M.

- 72 One Step at a Time: Incremental Implementation of a Water Quality Permit Program, Dennis Collentine

- 73 Overarching Values as Sustainability Indicators for Stakeholder-based Land Use Curriculum, Tim Collins
- 74 Exploring impacts of land-use change & resident. land-mngmnt behavior on water quality in the Potomac Gorge, USA via participatory modeling, Dawn Parker et al.

8-B Monday, 3:30-5:00 P.M.

- 75 Integrating Biodiversity and Economic Values in the Planning and Design of Ecosystem Networks, C. Martijn van der Heide, Arianne T. de Blaeij and Willemien Geertsema
- 76 Water Services, Stakeholder Preferences and Conflicting Interests: Importance of Public Participation in Water Management, Dennis Collentine and Paola Sabina Lupo Stanghellini
- 77 Experiences with Environmental Community Outreach in Coastal South Carolina, Angela Halfacre
- 78 Two Models of Land Use Education Pedagogy, John Warbach et al.

8-C Tuesday, 10:30-Noon

- 79 Agent-Based Land Use Models for Teaching, Extension and Collaborative Learning, Thomas Berger and Pepijn Schreinemachers
- 80 Land Care project, Bruce Hull and Valarie Cowden

PLENARY PAPERS

Plenary Session I, day1

- EU 81 Analysis and modelling of change in land use systems as exemplars of coupled natural and human systems (Richard Aspinall)
- US 82 Understanding Urbanization: A Comparative Review of Land Use Change Models & Data Sources (C. Dawkins, S. Lewis, G. Knapp)

Plenary Session II, day1

- EU 83 Tools for ex-ante assessment of agricultural and environmental policies: SEAMLESS (Martin van Ittersum et al.)
- EU 84 Sustainability Impact Assessment Tools (SIAT) for European Analysis: SENSOR (Stefan Sieber, Peter Verweij, et al.)
- US 85 Changing Landscapes Developing a Comprehensive Land Use/Land Cover Program for the Commonwealth of PA (Doug Miller et al.)

Plenary Session III, day2

- US 86 Connecting land use decision makers to their changing landscape: integration of research with tools, training and outreach at U. of CT (C. Arnold)
- US 87 Accommodating Land Use Change in the Coastal Zone: The Challenges of Linking Science-to-Management to Achieve Sustainable Ecosystems (R. DeVoe et al.)
- tbd 88 Plenary Paper on classroom science education, TBD

Lunch Speakers: tentative title

Payments for green services: a comparison between US and EU, and their perspective in the context of the OECD member countries (Wilfrid Legg)



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