

61st LCA Discussion Forum

HOW TO ASSESS IMPACTS OF LAND USE ON BIODIVERSITY AND SOIL QUALITY IN LCA?

March 15, 2016, ETH Zürich, Alumni Pavilion

We cordially invite you to the **61st Discussion Forum on Life Cycle Assessment**
The official language of this event is English

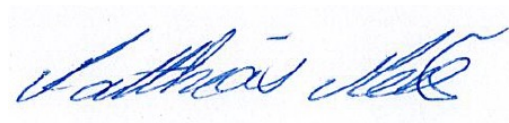
Assessments of land use related impacts on ecosystem resources covering biodiversity and soil production potential are still a difficult issue in life cycle assessment (LCA). Major challenges are that biodiversity and soil degradation need to be assessed within a specific bio-geographic context and that land use intensities need to be considered. While the real dynamics and complexity of ecosystem processes above and below ground require complex and data demanding models, LCA practitioners call for simple and easy to use assessment routines that are, however, prone to oversimplification. Impacts of land use on biodiversity and soil quality are a key issue for the food, feed, apparel, paper and bioenergy industries that are all based on agricultural and forestry-based products. On one hand, upcoming approaches like Natural Capital Valuation provide simplified assessments of biodiversity and soil quality impacts of land use changes. On the other hand, recent research activities have come up with more complex approaches that are not broadly applicable yet. Finally, the UNEP SETAC Life Cycle Initiative supports scientific harmonization activities in the assessment of biodiversity impacts of land use with the aim to provide a best practice environmental impact indicator applicable in life cycle assessment case studies and databases.

Finding balanced solutions that adequately represent ecosystem complexity and that are still relatively easily applicable will be key to improve informed decision making on the sustainability of agricultural and forestry-based products. The goal of this discussion forum is to present and discuss the state-of-the-art of methods for assessing land-use related impacts on ecosystems, the possibilities and limits of those approaches and the needs of the industry to integrate such methods.

We look forward to meeting you in Zürich



Rainer Zah, Quantis International AG
Organizing Committee



Matthias Meier, FiBL

Final Programme

Time	Title	Speaker [Chair]
8:45	Registration, coffee & croissants	
9:15	Welcome and introduction into the topic	Matthias Meier (FiBL)
	Assessments of land use and land use change related impacts in LCA	[Rainer Zah (Quantis)]
9:25	UNEP-SETAC Life Cycle Initiative on the assessment of biodiversity impacts of land use in LCA	Michael Curran (WSL)
9:55	Land use impacts on biodiversity loss in LCA: A bottom-up approach including agricultural intensities and landscape structural diversity	Matthias Meier (FiBL)
10:25	Validation of LCA biodiversity impact assessment in agriculture across Europe – The example of SALCA biodiversity	Philippe Jeanneret (Agroscope)
10:45	Coffee break	
11:15	Biodiversity assessment of land use in the Natural Capital Protocol	Samuel Vionnet (valuing nature)
11:35	Life cycle impact assessment (LCIA) of soil degradation: Development of a new impact assessment method in LCA	Franziska Stössel (ETH Zurich)
11:55	Modelling soil organic carbon changes – Implications for LCA studies	Thomas Prade (Swedish University of Agricultural Sciences)
	Discussion: Land use impact assessment methods – complementarity and differences?	<i>Moderation:</i> Rainer Zah (Quantis)
12 :15	Discussion	All referees
12:45	Lunch	
	Short presentations	[Matthias Meier (FiBL)]
14:00	First proposals for considering habitat fragmentation in Life Cycle Impact Assessment	Pyrène Larrey-Lassalle (Irstea)
14:10	Hemeroby – linked with biodiversity and soil quality – as an impact category indicator for the integration of land use into the Life Cycle (Impact) Assessment	Mirjam Busch (IFEU)
14:20	Land use biodiversity assessment in LCA –the case of the Finnish forests	Anne Holma (Finnish Environment Institute)
14:30	Modelling biodiversity in fuzzy terms	Jan Paul Lindner (Fraunhofer Institute for Building Physics)
14:40	Assessing biodiversity impacts and benefits of sheep wool	Eduardo Escobedo (RESP)
	Case studies on land use / land use change impacts in agricultural / forestry systems	[Matthias Meier (FiBL)]
14:50	Impact assessment methods for biodiversity and soil degradation: Challenges towards broad applicability in LCA	Niels Jungbluth (ESU services Ltd.)
15:10	Natural Capital Valuation of a T-Shirt with focus on biodiversity impacts	Heinz Zeller (Hugo Boss) & Gregory Simonnin (Quantis)
15:30	Coffee break	
15:50	How to quantify soil quality impacts in LCA	Mischa Zschokke (carbotech)
16:10	Capturing the biodiversity benefits of responsible forestry practices in LCA	Vincent Rossi (Quantis)
	Panel discussion: How to bridge the gap between scientific challenges and implementation in practice?	<i>Moderation:</i> Gregory Simonnin (Quantis)
16 :30	<i>Panellists:</i> Michael Curran (WSL) — Eduardo Escobedo (RESP) — Matthias Meier (FiBL) — Samuel Vionnet (valuing nature) — Heinz Zeller (Hugo Boss)	
17:10	Wrap-up and announcements	Rainer Zah (Quantis)
17:15	Farewell	

Practical information

Registration

To register for the 61st DF, please use the following link:

<http://www.registration.ethz.ch/eventolight/>

At the first instance you visit this Website you will be asked to create an account. Afterwards, please login with the information that is sent to you by email. Please click on “published events”, then select “Discussion forum on life cycle assessment 2016” and then click “Anmelden”. Afterwards, please follow the instructions.

Programme updates will be available at: www.lcaforum.ch

Call for short presentations

If you work on a topic relevant for Discussion Forum 61 and wish to present your findings please send title and abstract of your presentation to lcaforum@ethz.ch by February 15th 2016. The Organizing Committee will select the presentations best suited for the programme.

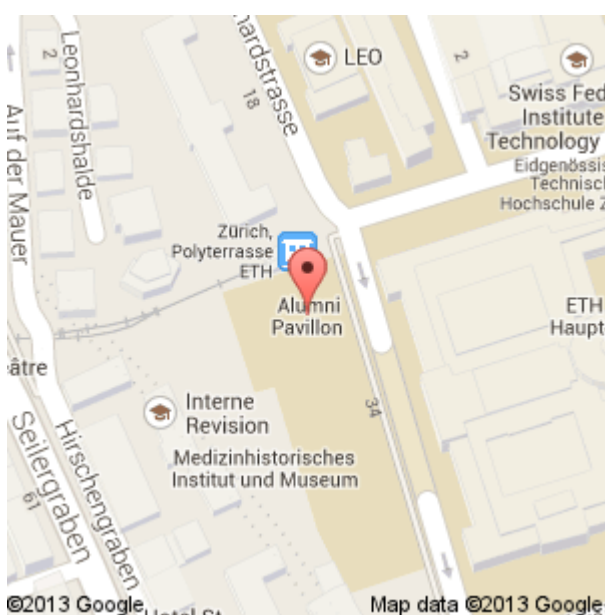
Lunch

Vouchers for lunch at the ETH restaurant will be provided to all participants. A vegetarian meal option is always on offer.

Location

The DF will take place in the Alumni (GEP) Pavillon, Swiss Federal Institute of Technology Zurich, 8001 Zurich.

<https://maps.google.ch/maps/ms?msa=0&msid=205813047619347088253.0004e0af154b1fc2c1968&ie=UTF8&ll=47.376616,8.546441&spn=0.00287,0.006968&t=m&z=18&vpsrc=6&iwloc=0004e0af154df9d0190e4>



For further information, please contact Barbara Dold: lcaforum@ethz.ch