



FACCE-MACSUR

**LiveM2016: International livestock modelling conference**  
**Modelling grassland-livestock systems under climate change**

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Topic:	Agriculture, Food Security, and Climate Change
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1.0	First Release	2016-07-31



# LIVEM2016



## International livestock modelling conference

### Modelling grassland-livestock systems under climate change



15-16<sup>th</sup> June 2016 Potsdam, Germany



Time	Day 1: Wednesday, June 15	Time	Day 2: Thursday, June 16
08:45	Welcome and introduction to the meeting		
09:00	<b>Keynote</b> <a href="#">Professor James Bullock, CEH</a> Modelling multiple ecosystem services in agricultural landscapes'	08:45	<b>Keynote</b> <a href="#">Klaas Johan Osinga, COPA-COGECA</a> Farmers and models: a dangerous liaison?'
09:30	<b>Session 1</b> Efficiency in the context of climate change	09:15	<b>Session 5</b> Modelling and stakeholders
10:30	<b>COFFEE</b>	10:30	<b>COFFEE</b>
11:00	<b>Session 2</b> Efficiency in the context of climate change	11:00	<b>Session 6</b> Model comparison, linkages and challenges
12:15	<b>LUNCH</b>	12:30	<b>LUNCH</b>
13:15	<b>POSTER SESSION</b>	13:30	<b>Session 7</b> Climate change impacts, adaptation and mitigation (Part I)
14:00	<b>Session 3</b> Climate change impacts, adaptation and mitigation		14:30
15:45	<b>COFFEE</b>	14:45	<b>Session 8</b> Climate change impacts, adaptation and mitigation (Part II)
16:15	<b>Session 4</b> Future of the livestock and grassland modelling community		15:45
17:15	<b>END OF DAY</b>	16:00	<b>CLOSE</b>
18:30	<b>Guided Tour</b>		
19:00	<b>Group meal in city</b>		



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## **FULL PROGRAMME**

### **DAY 1**

**08.00 to 08.45 REGISTRATION**

**08:45 to 9:00 Welcome and introduction to meeting**

**09.00: Keynote**

'Modelling multiple ecosystem services in agricultural landscapes' *James Bullock, CEH*

#### **Session 1**

**09.30 – 10.30: Efficiency in the context of climate change**

Towards sustainable livestock production systems: analysing ecological constraints to grazing intensity  
(*Tamara Fetzel, Alpen Adria University Klagenfurt*)

Large scale impacts of grazing pressure under climate change (*Susanne Rolinski, PIK*)

Exploring yield gaps in grass-based beef production systems under climate change by integration of grass and cattle growth models (*Aart van der Linden, Wageningen UR*)

**10.30 – 11.00: COFFEE**

#### **Session 2**

**11.00 – 12.15: Efficiency in the context of climate change (2)**

Technical Efficiency of Laying Hen Enterprises in Turkey (*Nurşen Doğan, Istanbul University*)

Optimising farm management considering food provision, economic returns, emissions of greenhouse gases and ammonia, and nitrogen leaching (*Vera Eory, SRUC*)

Modelling responses of forages to climate change with a focus on nutritive value (*Perttu Virkajärvi, Luke*)

Effects of forage/roughage characteristics on enteric methane emission (*André Bannink, Wageningen UR*)

**12.15 – 13.15: LUNCH**

**13.15 – 14.00: POSTER SESSION**

#### **Session 3**

**14.00 – 15.45: Climate change impacts, adaptation and mitigation**

Modelling the impact of seasonal drought on herbage growth under climate change (*Pier Luigi Calanca, Agroscope*)

Simulation of manure production and enteric methane emissions from individual beef cattle in Mato Grosso, Brazil – A case study with the model RUMINANT (*Luciano Mendes, IIASA*)

Determining the impact of future climate scenarios on feed supply and greenhouse gas emissions intensity from dairy farms in Norway (*Tomas Persson, NIBIO*)

Integrated Assessment of Climate Change Impacts on Farms and Ecosystems in a Grassland Dominated Austrian Landscape (*Martin Schönhart, BOKU*)

Modelling Adaptation to Climate Change for Livestock Systems (*Vera Eory, SRUC*)

Bayesian Networks to assess potential barn adaptations to climate change in dairy farms (*Elena Galán, BC3*)

**COFFEE 15.45 – 16.15**

#### **Session 4**

**16.15 – 17.15: The future of the livestock and grassland modelling community**

Progress in LiveM 2014 – 2016 (*Richard Kipling, Aberystwyth University*)

The GRA Animal Health and GHG Emissions Network: Achievements and future (*Nick Wheelhouse, Edinburgh Napier University*)

The future of MACSUR (*Martin Köchy, Thünen-Institut*)

**17.15: END OF DAY**

**18.30: Guided tour**

**19.30: Group meal in the city**

## **DAY 2**

**08.45: Keynote**

'Farmers and models: a dangerous liaison?' *Klaas Johan Osinga, COPA-COGECA*

#### **Session 5**

**09.15 – 10.30: Modelling and stakeholders**

Challenges and approaches to the communication of agricultural modelling (*Richard Kipling, Aberystwyth University*)

An index based production costs system to evaluate present and future adaptation and mitigation costs in Central European dairy and cattle farming (*Karin Heinschink, Federal Institute of Agricultural Economics*)

Food and nutrition security in Europe – a quantification of multi-stakeholder scenarios (*Andre Deppermann, IIASA*)

Changing to sustainable diets: The case of 'Meat Free Monday' in the Norwegian Armed Forces (*Anna Milford, NIBIO*)

**10.30 – 11.00: COFFEE**

### Session 6

**11.00 – 12.30: Model comparisons, linkages and challenges**

Global Research Alliance on Agricultural Greenhouse gases - benchmark and ensemble CROP AND GRASSLAND MODEL estimates (*Renáta Sándor, INRA*)

A comparison of greenhouse gas (GHG) emissions from dairy farms by four systems models with eight agro climatic scenarios (*Daniel Sandars, Cranfield University*)

Farm-scale models of greenhouse gas mitigation and adaptation; how to avoid reinventing the wheel (*Nick Hutchings, Aarhus University*)

Dynamics of CO<sub>2</sub> equivalent emissions and manure production from grazing beef cattle herds in Mato Grosso, Brazil – Synergies between the models EPIC and RUMINANT (*Luciano Mendes, IIASA*)

Modelling heat stress on livestock - how can we reach long-term and global coverage? (*David Leclère, IIASA*)

**12.30 – 13.30: LUNCH**

### Session 7

**13.30 – 14.30: Climate change impacts, adaptation and mitigation (1)**

Effect of temperature humidity index on the occurrence of clinical mastitis in dairy heifers (*Andrea Vitali, University of Tuscia*)

Developing a near real-time satellite-based monitoring system for Rift Valley fever in Senegal and Mauritania (*Claudia Pittiglio, FAO*)

Endemic sheep and cattle diseases & greenhouse gas emissions (*Dave Bartley, Moredun Research Institute*)

**14.30 – 14.45: COFFEE**

### Session 8

**14.45 – 15.45: Climate change impacts, adaptation and mitigation (2)**

Livestock parasites and climate change: a two-way interaction (*Naomi Fox, SRUC*)

Improved animal health reduces greenhouse gas emissions intensity from dairy cows (*Şeyda Özkan, NMBU*)

Farm scale cost-effectiveness of greenhouse gas mitigation options (*Vera Eory, SRUC*)

**15.45: WRAP UP AND CLOSE**