



## TradeM International Workshop

# Economics of integrated assessment approaches for agriculture and the food sector

25-27 November 2014 at Hurdalsjøen Hotel, Norway  
(close to Oslo Airport)

### Aims and objective

Climate change, food security, and agricultural production interact in complex ways. A major challenge for scientists is to understand and assess the biological, economic, and ecological interdependencies in the context of climate change and food security. More and better knowledge is necessary to aid politicians, stakeholders and farmers in their decisions.

The Knowledge Hub FACCE MACSUR (Modelling European Agriculture with Climate Change for Food Security) ([www.macsur.eu](http://www.macsur.eu)) assembles the excellence of research in Europe in crop, livestock and economic modelling. MACSUR cooperates with the AgMIP community ([www.agmip.org](http://www.agmip.org)) and particularly welcomes AgMIP contributions.

The workshop will bring together researchers with interest in integrated assessment approaches which are used to analyze agriculture, food security and climate change.

The event has four major **goals**:

- (i) to critically discuss the state-of-the-art and future perspectives of integrated assessment approaches
- (ii) to study and assess examples of applied modelling approaches integrating crop, livestock, and economic models
- (iii) to foster international collaboration in the research areas of food security, climate change, and agrosystem modelling
- (iv) to plan and identify next steps to achieve TradeM contributions to MACSUR goals

**Keynote-speaker: John Antle** (Oregon State University), and co-leader of the Economics Team of AgMIP



### More information:

[http://www.nilf.no/forskning\\_og\\_utredning/prosjekter/economics\\_of\\_integrated\\_assessment\\_approaches\\_for\\_agriculture\\_and\\_the\\_food\\_sector](http://www.nilf.no/forskning_og_utredning/prosjekter/economics_of_integrated_assessment_approaches_for_agriculture_and_the_food_sector)





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## *Program*

**Tuesday, 25 November**

Transport from Oslo Gardermoen airport (see last page)

19.00 Dinner

*Welcome address*

*Mogens Lund*

Director of Research Department at NILF

*Of Norway and agriculture*

*Ivar Pettersen*

Senior Policy Analyst at NILF

## Wednesday, 26 November

07.00 – 08.30 Breakfast

08.30 – 10.45 Keynote lectures (Chair: Øyvind Hoveid)

***Climate Change and Food Security: Improving the Relevance and Credibility of Global and Regional Integrated Assessments***

*John Antle, AgMIP and Oregon State University*

***The future of agriculture, food, and climate: A long-term outlook***

*Josef Schmidhuber, FAO*

***Climate policy with learning in a stochastic dynamic climate environment***

*Eric Nævdal, Frisch Center, University of Oslo*

10.45 – 11.00 Coffee break

11.00 – 12.30 Invited talks (Chair: Klaus Mittenzwei)

***Halftime in MACSUR – what have we learned and what comes next?***

*Martin Banse, Thünen Institute*

***Challenges for crop modelling in integrated (regional) assessment of climate change risks to food production***

*Reimund Rötter, Natural Resources Institute, Finland*

***LiveM and the knowledge hub concept: Grassland and livestock modelling in MACSUR2***

*Richard Kipling, Aberystwyth University*

12.30 – 13.30 Lunch

13.30 – 15.15 Session 1 (Chair: Floor Brouwer)

***Developing Representative Agricultural Pathways (RAPs): what has been done and what lies ahead of us?***

Presenter: *A Biewald*, Discussant: *F Sinabell*

***Exploring yield trends and gaps in the EU***

Presenter: *A Zimmermann*, Discussant: *R Rötter*

***Warmer, Wetter, Wilder? Weather Evidence from the Grain Markets, 1960-2014***

Presenter: *M Steen*, Discussant: *T Heckelee*

***Contributions from bio-economic farm models to the analysis of climate change adaptation: lessons from MACSUR regional***

Presenter: *M Schönhart*, Discussant: *K Mittenzwei*

15.15 – 15.30 Coffee break with healthy fruit

15.30 – 17.15 Session 2 (Chair: Franz Sinabell)

***Communicating modelling***

Presenter: R Kipling, Discussant: D Sandars

***A prototype stochastic dynamic equilibrium model of the global food system***

Presenter: Ø Hoveid, Discussant: H Lehtonen

***Incentivising for climate change mitigation in the context of adaptation to climate and market changes at the farm level in North Savo region***

Presenter: X Liu, Discussant: G Dono

***The economic impact of water scarcity under diverse water qualities and desalination policies: The case of Israel***

Presenter: M Shechter, Discussant: M Schönhart

17.15 – 17.45 Coffee break with unhealthy pastries

17.45 – 19.00 Session 3 (Chair: Heikki Lehtonen)

***Integrated Assessment of policy and climate change impacts: a case study on protein crop production in Austria***

Presenter: F Sinabell, Discussant: P Zander

***The importance of considering farm management adaptations in climate change impact studies: A Pan-European integrated assessment***

Presenter: T Heckeley, Discussant: A Biewald

***How volatile are farm incomes? The case of Italian farms***

Presenter: S Severini, Discussant: M Shechter

20.00 Dinner

## Thursday, 27 November

07.00 – 08.30 Breakfast

08.30 – 10.15 Session 4 (Chair: Klaus Mittenzwei)

***Modelling regional agricultural land use and climate change adaptation strategies in four case study regions in Northern Germany***

Presenter: P Zander, Discussant: F Brouwer

**Simulating optimum land use at any location for any future scenario (CLIMSAVE/IMPRESSIONS)**

Presenter: D Sandars, Discussant: Ø Hoveid

**Diet change for reduced GHG emissions in Norway**

Presenter: A Milford, Discussant: M Banse

**Applications of Markov chains approach for expecting extreme precipitation changes having impact on food supply**

Presenter: W Bojar, Discussant: A Zimmermann

10.15 – 10.45 Coffee break with healthy fruit and check out

10.45 – 12.30 Session 5 (Chair: Øyvind Hoveid)

***Awareness of climate change for adaptations of the farm sector***

Presenter: G Dono, Discussant: A Milford

***Evaluation clover grass as a climate change adaptation measure in agriculture at the sector level***

Presenter: H Lehtonen, Discussant: R Kipling

***Integrated Assessment of Climate Change Mitigation and Adaptation Impacts at Field and Farm level in the Austrian Mostviertel Region***

Presenter: M Schönhart, Discussant: X Liu

***The role of uncertainty in assessing agricultural responses to food security and climate change: A Case Study from Norway***

Presenter: K Mittenzwei, Discussant: S Severini

12.30 – 13.30 Lunch

13.30 – 14.45 TradeM Business (Chair: Floor Brouwer and Franz Sinabell)

- 1) Phase 1 dissemination activities
- 2) Phase 2 planned activities
- 3) Other business

15.00 Transfer to Oslo Gardermoen Airport