



International Advanced Course “Environmental Impact Assessment of Livestock Systems” February 11-15, 2019, Wageningen, The Netherlands

After two successful editions, we are ready for a new group of enthusiastic and motivated students. This third edition of the course ‘Environmental impact assessment of livestock systems’ will be held from 11 to 15 February 2019 at Wageningen University (NL), and is open for registration now!

Background and aim

Feeding nine billion people in 2050 within the carrying capacity of the earth is perhaps the greatest challenge mankind has ever faced. An important aspect of the debate about feeding the world is the role of livestock production. The current livestock sector already poses severe pressure on the environment and competes increasingly for scarce resources, such as land, water, fossil energy and phosphorus. The demand for livestock products is expected to increase significantly. Without major changes, therefore, the above described environmental concerns about the livestock sector will increase only further. So we are facing an urgent question: how to reduce the environmental impact of production of animal-source food? To gain insight into future options and limitations of reducing the environmental impact of livestock production, we need sound environmental impact assessment tools. The **aim of this course** is to provide participants with advanced knowledge, both theoretical and practical, on the environmental impact assessment of livestock systems. We will discuss the latest insights of environmental impact assessment tools. Key issues addressed are: how to incorporate carbon sequestration in an assessment? How to perform an uncertainty or sensitivity analysis? How to assess land use efficiency of livestock systems? Which water footprint method is appropriate? Which metrics should we use to determine emissions of greenhouse gases? What’s the difference between a nutrient flow analysis and a life cycle assessment (LCA)? What’s the difference between an attributional or consequential LCA, and when to apply what method? How to assess the impact of livestock production on biodiversity?

Target group and registration

This PhD course will be of great interest to PhD students and professionals exploring environmental consequences of (innovations in) livestock production systems. We do expect that you have basic knowledge about the relation between livestock and the environment, nutrient flow analysis and life cycle assessment. Participants are challenged to actively contribute to discussions, and within the programme three sessions are devoted to 5-min pitches. In these 5-min pitches you can address your methodological challenge(s) so we can incorporate these challenges in our discussions.

The number of participants is limited to 40 persons, admitted on a ‘first-come’ basis. Registration fee is 500 € for PhD students, 800 € for other academic staff and 1200 € for company staff. The course fee includes materials, coffee/tea during breaks, lunches and a course dinner but does not cover accommodation. For further information and registration please contact Corina van Middelaar:

Corina.vanMiddelaar@wur.nl.

Study load

The study load of this course is 2.0 ECTS, including preparation.

Organization

Prof. Dr. Imke de Boer
Dr. Corina van Middelaar

Animal Production Systems, Wageningen University
Animal Production Systems, Wageningen University

PhD course “Environmental impact assessment of livestock systems”

Preliminary program 2019

Mon 11 feb	Topic / Lecturer
09.30-10.00	Registration
10.00-10.30	Introduction to the course – <i>Imke de Boer</i>
10.30-12.00	Livestock systems and their impact on the environment – <i>Oene Oenema</i>
12.00-13.30	Lunch
13.30-15.00	Nutrient flow analysis at various scales – <i>Corina van Middelaar</i>
15.00-15.30	Coffee/tea
15.30-17.00	Practical nutrient flow analysis – <i>Corina van Middelaar</i>
19.00	Informal night with pitches – address your challenge!
Tue 12 feb	
9.00-10.30	Concept of life cycle assessment – <i>Imke de Boer</i>
10.30-11.00	Coffee/tea
11.00-12.30	Handling multi-functionality of livestock systems – <i>Henk Udo</i>
12.30-14.00	Lunch
14.00-15.30	Consequential life cycle assessment – <i>Hannah van Zanten</i>
15.30-16.00	Coffee/tea
16.00-17.30	Practical consequential LCA– <i>Hannah van Zanten</i>
19.00	Course dinner
Wed 13 feb	
10.00-12.00	The role of livestock in future food systems – <i>Imke de Boer</i>
12.00-13.30	Lunch
13.30-14.00	Intro uncertainty & sensitivity analysis in livestock systems - <i>Evelyne Groen</i>
14.00-15.00	Matrix based LCA - <i>Reinout Heijungs</i>
15.00-15.30	Coffee/tea
15.30-17.30	Practical uncertainty & sensitivity analysis - <i>Evelyne Groen/ Reinout Heijungs</i>
Thu 14 feb	
9.00-10.30	Deforestation, agricultural production and trade – <i>Martin Persson</i>
10.30-11.00	Coffee/tea
11.00-12.30	GHG metrics – <i>Martin Persson</i>
12.30-14.00	Lunch
14.00-15.30	Concepts to assess impacts on biodiversity – <i>Raimon Ripoll-Bosch</i>
15.30-16.00	Coffee/tea
16.00-17.30	Ecosystem services – <i>Raimon Ripoll-Bosch</i>
Fri 15 feb	
9.00-10.30	Sustainable food security / Think & Do: a World Bank project – <i>Pierre Gerber</i>
10.00-10.30	Coffee/tea
11.00-12.00	Practical: Think & Do – <i>Pierre Gerber</i>
12.00-13.30	Lunch
13.30-15.00	Wrapping up/ course evaluation