



OPTIONAL GGAA 2022 Data Management Workshop:

Assessing GHG Emissions and Mitigation Measures from Livestock Systems Using Models

Sunday, June 5, 2022 | 1:00PM – 5:30PM | Orlando, Florida, USA

\$50.00 USD (Space is limited. Advance registration required.)

www.conference.ifas.ufl.edu/GGAA

This workshop entails two, two-hour sessions conducted onsite at GGAA 2022. You must attend in person to participate. The initial session includes content focusing on the principles and basics behind i) general modelling GHG quantification and climate change mitigation in livestock systems and ii) the FAO livestock model GLEAM-i. After a refreshment break, the second hands-on session will involve practical work using the GLEAM-i model.

PLEASE NOTE: To make the most of this workshop, you are expected to participate in all parts but, if you miss a session, you may still participate in subsequent sessions, however, there is no fee reduction for missed portions.

Workshop Overview

In the context of the Paris Agreement on climate change, the global food system, including livestock, is expected to play an important role in achieving the global temperature targets of 1.5 or 2°C through large-scale GHG emissions reduction. Many studies have shown that there is potential to reduce GHG emissions and enhance soil carbon sequestration in livestock systems. However, bridging the gap between scientific knowledge in GHG mitigation, decision making and policy implementation remains challenging. This course introduces methods based on farm modelling for livestock climate change mitigation options analysis. We will also present practical work based on livestock real case studies with the FAO Global Livestock Environmental Assessment Model interactive (GLEAM-i).

Attendees will Receive

- Four hours of personalized instruction by two livestock and climate change and modelling specialists.
- An overview of state-of-the-art methods for modelling GHG emissions and soil C changes at farm and national level.
- Basic skills using simulation models and tools for estimating GHG emissions and soil C changes at farm level and national level.

To maximize the benefits of participating, attendees need to:

- Bring a laptop with a fully charged battery
- Review introductory videos on GLEAM-i available in the multimedia section at this site: <https://www.fao.org/gleam/resources/en/>

About the Instructors

Dr. Anne Mottet, Livestock Development Officer, UNFAO, Rome, Italy



Anne Mottet is a livestock development officer with the UN Food and Agriculture Organization. She holds a MSc in agronomy and a PhD in Agro-ecosystems and has close to 20 years of experience in supporting policy makers and stakeholders for the transition to sustainable food systems. She has developed tools and carried out analysis

and global assessments on topics related to livestock and animal products, natural resources, climate change and agroecology. Anne is a published author (over 4,000 citations), an elected member of the Scientific Advisory Board of the Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI) and an invited reviewer of IPCC reports and guidelines. Anne is currently coordinating a program of work providing technical support and guidance to countries and International Funding Institutions such as World Bank and IFAD on low carbon livestock development. She is also co-leading a program of work on technical support for a transition to sustainable food systems using a multicriteria assessment tool called TAPE, the Tool for Agroecology Performance Evaluation.

Dr. Agustin del Prado, Research Professor, BC3, Basque Centre For Climate Change (BC3), Leioa, Spain



Agustin del Prado holds a PhD in Biological Sciences (2007) for the University of the Basque Country (Spain). After a post-doc and senior researcher positions at IGER (UK) (currently Rothamsted Rs) (2002-2008) he became a Research

Professor and group leader at the Basque Centre For Climate Change (BC3) (Spain). His main area of expertise is the development and use of mathematical simulations models to assess the effect of ruminants farming systems on climate change and study of potential strategies for climate change mitigation and adaptation. Amongst other duties, he has been an IPCC Lead Author for the 2019 Refinement to the 2006 IPCC Guidelines for National GHG Inventories for the agricultural soil N₂O and livestock GHG chapters. He was the first president (2012-2017) and promoter of the Spanish Sci. Network REMEDIA on climate change mitigation from agriculture, livestock, and forestry sectors <https://redremedia.org/>. He has developed over 20 mathematical models (e.g., SIMSDAIRY, SIMSWASTE; SIMSNIC, NGAUGE, LANAS, NCYCLE_IRL, SIMSSR...) and his work has resulted in more than 50 publications.

Questions? Email Dr. Anne Mottet at: Anne.Mottet@fao.org or Dr. del Prado at: agustin.delprado@bc3research.org