

## Special Issue

# Greenhouse Gas Emissions and Life Cycle Assessment of Livestock Production Systems

### Message from the Guest Editors

Livestock production is an important component of the global food supply and the rural economy; however, it has been reported that livestock production systems are major emitters of greenhouse gases (GHGs), particularly methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), worldwide.

Livestock production accounts for 14% of the global GHG emissions and for more than one half of global anthropogenic ammonia emissions, which contribute to acidification. Concerted efforts are thus needed to reduce these emissions. The life cycle assessment (LCA) method is suitable for environmental evaluations and can be used to evaluate the environmental impacts of livestock production for the purpose of mitigating GHG emissions and other environmental impacts. In this Special Issue, we aim to publish original research articles, review papers, and opinion pieces on GHG emissions from, and environmental impacts of, livestock production systems.

### Guest Editors

Dr. Akifumi Ogino

Institute of Livestock and Grassland Science, National Agriculture and Food Research Organization (NARO), Tsukuba, Japan

Dr. Fuminori Terada

Azabu University, Kanagawa, Japan

Dr. Takashi Osada

Institute of Livestock and Grassland Science, National Agriculture and Food Research Organization (NARO), Tsukuba, Japan

### Deadline for manuscript submissions

closed (20 November 2021)



## Agriculture

an Open Access Journal  
by MDPI

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/si/54928](https://mdpi.com/si/54928)

*Agriculture*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[agriculture@mdpi.com](mailto:agriculture@mdpi.com)

[mdpi.com/journal/  
agriculture](https://mdpi.com/journal/agriculture)





# Agriculture

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/journal/  
agriculture](https://mdpi.com/journal/agriculture)



## About the Journal

### Message from the Editor-in-Chief

*Agriculture* (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

---

### Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, Australia

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, RePEc, and other databases.

#### Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)