

## Special Issue

# Modeling and Simulation in Geographic Information Science: A Useful Tool for Land System Science Studies

### Message from the Guest Editors

This Special Issue, entitled *Modeling and Simulation in Geographic Information Science: A Useful Tool for Land System Science Studies*, provides an overview of recent advances in land system science while at the same time setting the research agenda for the land system science community. The Special Issue will focus on the different approaches to land systems science and their dynamics, current trends, research topics, and suggested ways forward. As reported by the Web of Science database, the use of geographical information system (GIS) based spatial analysis modeling for different aspects of land system science began in the early 1990s and has continued since then, with significant growth in the 21st century. GIS has been extensively used for various land system studies like to understand long-term urbanization trends, deforestation and its drivers, agricultural intensification studies, land degradation and desertification, the impact of agricultural land change on landscape and urban services, and artificialization of land surface.

---

### Guest Editors

Dr. Shafique Matin

Dr. Gabriela Mihaela Afrasinei

Dr. Pulakesh Das

Dr. Mohd Yawar Ali Khan

---

### Deadline for manuscript submissions

closed (31 July 2023)



Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/si/94969](https://mdpi.com/si/94969)

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

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





## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



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



# About the Journal

## Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

---

## Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,  
Columbus, OH 43210, USA

---

## Author Benefits

### Open Access:

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

### High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

### Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1  
(Geography, Planning and Development)