Special Issue

Digital Agroecology: Sensor and Data Technologies to Promote Regenerative Food Systems

Message from the Guest Editors

Faced with global issues, including climate change, biodiversity loss, soil degradation, impaired water quality, etc., often bear the greatest burden. Investing in strengthening small-scale agriculture worldwide presents a key opportunity not only to address these global issues but also to improve the livelihoods of millions of farmers and their communities. In the near future, the continued development and application of sensor and data technologies, along with complementary technological tools, could serve as key drivers in facilitating the adoption of agroecological models and regenerative food systems, scaling them beyond the small farm level and contributing to the democratization of digital agroecological solutions for sustainable, safe, and nutritious food production. This Special Issue aims to highlight advancements in sensor and data technologies that support agroecological practices. Topics of interest include the following research areas:

- Remote sensing technologies;
- Ground-based proximal sensing;
- Biosensors
- Scalable next-generation sequencing (NGS) methods and etc.

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Deadline for manuscript submissions

15 January 2026

AgriEngineering

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 4.7

mdpi.com/si/241211

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