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Journal Editorial: The Role of Science, Technology and Innovations Towards Sustainable Development

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Science, Technology and Innovation (STI) are essential drivers of sustainable and inclusive development.^[1,2] Science, technology, and innovation must address all aspects of sustainable development-economic, social, and environmental considerations and their interrelations, as technological advancements can negatively impact both social and environmental well-being. Science helps to understand environmental systems and human impact. It informs policy decisions and helps predict long-term outcomes of unsustainable practices. Technology offers practical tools and solutions by translating scientific understanding in to practical solutions. Innovation ties them together to have creative and efficient ways to meet human needs without compromising future generations.

In the recent years, STI contributing to sustainability in clean energy by advancing solar, wind and batteries and enables shift away from the fossil fuels by making low carbon energy more accessible and affordable.^[3] In agriculture, precision farming and biotechnology are improving crop yields while reducing environmental impact.^[4] Similarly, digital innovations like artificial intelligence, Internet of Things (IoT), and big data are helping monitor ecosystems, reduce waste, and enhance urban planning.^[5-7]

Journal of Collective Sciences and Sustainability (<https://gr-journals.com/CSS/index.php>) (accessed 26 June 2025) is an open-access, quarterly, multidisciplinary, peer-reviewed journal that publishes high-quality articles on the technical, environmental, cultural, economic, and social

aspects of sustainability. It emphasizes the role of science and technology to a sustainable future through innovation, technological advancements, and smart solutions.

The journal offers a dynamic space for advancing scholarly work on sustainability and sustainable development, engaging with critical global challenges that affect the long-term well-being of humanity. With a focus on innovative and interdisciplinary approaches, this journal promotes research that supports balanced, inclusive, and resilient solutions for a sustainable world.

This journal welcomes a variety of article types, including original research papers, comprehensive reviews, and impactful case studies, offering a dynamic space for scholarly exchange and professional insights.

This first issue (June 2025) brings together a diverse collection of high-quality research articles. Pathan and Patare explored how profit-centric AI development concentrates control in the hands of a few, risking widespread job displacement, ethical oversights, and socioeconomic instability. Narendra Yadav and Pallavi Yadav discussed the role of blockchain in cryptocurrency and information technology. Goar *et al.* reported Valence Aware Dictionary and sentiment Reasoner (VADER) based an analysis of public sentiments expressed in the Twitter database regarding the Coronavirus disease (COVID-19) vaccine. Soni and Poonia investigates the potential for an enhancement in digital forensics based on an integration with Artificial Intelligence (AI) and Open-Source Intelligence (OSINT) sources. Shaik *et al.* proposed a system

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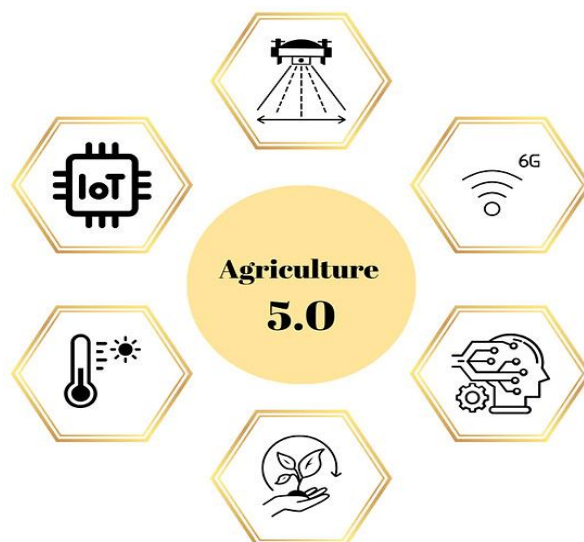


Fig. 1: Technological components supporting Agriculture 5.0.^[8]

that offers a mechanically simple, scalable and modular solution without moving parts, making it ideal for applications requiring silent operation and precise thrust control.

As a newly launched journal, we are dedicated to providing a leading multidisciplinary platform to emphasize the role of science and technology to a sustainable future through innovation, technological advancements, and smart solutions. We are committed to uphold the rigorous and efficient peer review process ensuring that every published work meets the highest standards.

On behalf of the editorial office, we extend a heartfelt welcome to all our readers, authors, and reviewers. Your participation and engagement are critical to the success of this journal. We encourage you to contribute your work, share your insights, and help us to shape this journal into a leading forum for innovation and discovery.

Conflict of Interest

There is no conflict of interest.

Supporting Information

Not applicable

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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