

# From *FASE* to *ENGINEERING Agriculture*: steering green and sustainable agriculture via *ENGINEERING Consortium*

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Since its foundation in 2014, *Frontiers of Agricultural Science and Engineering (FASE)* has been dedicated to documenting and advancing interdisciplinary innovation at the intersection of agricultural science and engineering technology, establishing itself as a trusted platform for academic exchange within the field. Looking back, the journal has witnessed the emergence of precision and smart agriculture, the application of bioengineering in breeding, breakthroughs in resource recycling technologies, and the evolution of Agriculture Green Development (AGD). These contributions are not only preserved in print but also actively shape the trajectory of global agriculture in practice.

To further enhance the brand consistency and international recognition of the journal cluster, Chinese Academy of Engineering (CAE) has implemented a systematic brand upgrade for its nine key journals (including *FASE*) in agriculture, mechanical engineering, information and electronic engineering, chemical engineering, energy, structural and civil engineering, environment, management, and medicine. Since 2026, the initiative adopts a unified naming convention of “ENGINEERING + academic field”, establishing a journal matrix with a clear and cohesive brand identity. This move marks a crucial step in the strategic transformation of the *ENGINEERING* series from a “collection of individual

journals” into a collaboratively developed “branded cluster”. By unifying the brand identity, this initiative not only strengthens the disciplinary positioning and recognition of each journal but also leverages the overarching “ENGINEERING” brand to foster synergy across the cluster. This enhances the efficiency of international academic dissemination and amplifies global influence. The strategic alignment reflects CAE’s systematic approach to advancing the structured development of academic branding and elevating China’s voice in international engineering science and technology discourse.

At present, science continues to evolve, and the era constantly presents new challenges. In the face of multiple pressures such as climate change, food security, and ecological sustainability, traditional agricultural production models are undergoing profound systemic transformation. There is a growing recognition that the modernization of agriculture is, in essence, a systemic revolution rooted in engineering thinking—one that must treat agriculture as a holistic system that is designable, optimizable, and intelligently controllable. Guided by this understanding and in active alignment with the overall strategic direction of the *ENGINEERING* journal cluster under CAE, this journal will officially transition from *FASE* to *ENGINEERING Agriculture* beginning with Issue 4, 2026, given that the first three issues had already been finalized and

published prior to the renaming decision. Concurrently, the publication frequency will shift from quarterly to bimonthly, with a full transition to the Continuous Article Publishing (CAP) model.

This series of adjustments represents more than a mere change in name or a simple acceleration of publication pace. Rather, it signifies the journal's reaffirmation of its academic mission and proactive upgrade of its scientific paradigm:

**• Renaming reflects a refined academic focus**

By placing “ENGINEERING” at the forefront, the journal explicitly advocates for empowering agricultural research under this brand. This signals a shift from a broad emphasis on “scientific frontiers” to a sharper focus on implementable, replicable, and scalable “solutions for agricultural development”.

**• Increasing publication frequency demonstrates an accelerated academic responsibility**

The transition to a bimonthly schedule aims to disseminate innovative ideas and critical technologies more rapidly, so as to respond to the fast-growing output of global research, accelerate the translation of knowledge into practice, and gain valuable time in addressing global agricultural challenges.

**• CAP publishing enables real-time knowledge dissemination**

By adopting the CAP model, articles are published online immediately upon acceptance and completion of the editorial process, eliminating the wait for a fixed issue release date. This approach significantly shortens the timeline from submission to publication, ensuring that research findings enter the academic exchange ecosystem in real time, and can also accelerate indexing in major databases, thereby further enhancing the timeliness, visibility, and responsiveness of knowledge dissemination.

Over the past 12 years, the journal has continuously refined its aims and scope—evolving from a broad disciplinary platform to one sharply focused on agricultural sustainability and cross-disciplinary integration<sup>[1]</sup>. Now renamed as *ENGINEERING Agriculture*, it enters a new chapter with an upgraded mission: to advance engineering-driven agricultural science and technology. This evolution harnesses engineering thinking to transform scientific advances into actionable solutions to

practical challenges, grounded in the pursuit of sustainable development. Addressing real-world agricultural challenges through systems-based approaches remains a global priority. Meanwhile, the editorial board has grown steadily; in recent years, the inclusion of young scholars has infused fresh energy and vitality into the journal. With the collaborative efforts of the board and editorial office, the journal has achieved notable progress in article quality, international influence, and communication capacity.

Launched in 2014, *FASE* has been indexed in ESCI and Scopus since 2017. According to Web of Science, the journal's Impact Factor (IF) rose from 0.7 in 2017 to 3.6 in 2023 (Fig. 1), propelling it from Q4 to Q1 in the Agronomy category and placing it among the top 14% of journals in the field. Although the IF saw a modest decline in 2024, the journal maintained its Q1 ranking and remained in the top 21%, underscoring the continued strength and stability of its academic influence.

A similar trend is evident in the journal's publication output. From 2014 to 2025, *FASE* experienced significant overall growth, characterized by fluctuations but following a trajectory of rise, consolidation, and renewed breakthrough (Fig. 2). Annual publications surged to 58 in 2017, peaked at 69 in 2020, stabilized in the mid-50s, and climbed again to 64 in 2025. From 43 papers at its inception to 64 in 2025, this steady growth underscores the journal's expanding scale and growing academic influence.

*FASE* has established a diversified and high-impact communication strategy, supported by an integrated online-offline media ecosystem. Content is disseminated through four core formats: Featured Article Interpretations (Chinese), Bilingual News Releases, Popular Science Articles, and One-minute Explanatory Videos. By translating and visualizing research, these formats are disseminated across a broad media matrix—including WeChat Public Platform, WeChat Video Channel, EurekAlert, AlphaGalileo, ScienceNet, LinkResearcher, and five other platforms—to enhance accessibility and reach. Since 2019, the *FASE* WeChat Public Platform has seen steady growth in its follower base, reaching 50,000 by March 2026 (Fig. 3). The journal has also established an academic lecture platform<sup>[2]</sup>, organizing 98 online and offline live events with recordings made publicly available. In 2024, the article “Saline-alkali soil reclamation and utilization in China: progress and prospects”<sup>[3]</sup> garnered over 10,000

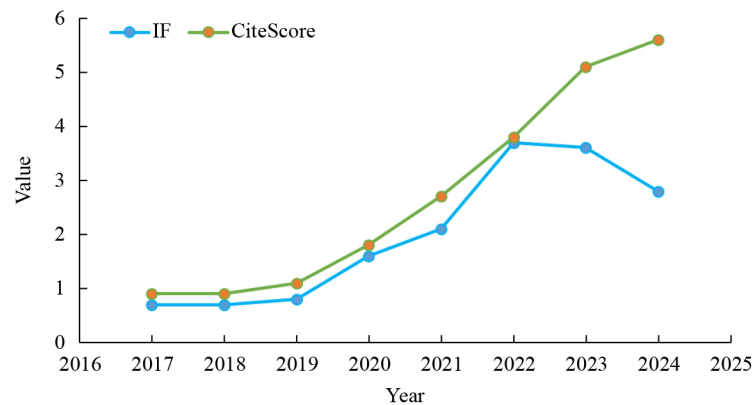


Fig. 1 The trend of the Impact Factor (IF) and CiteScore of FASE.

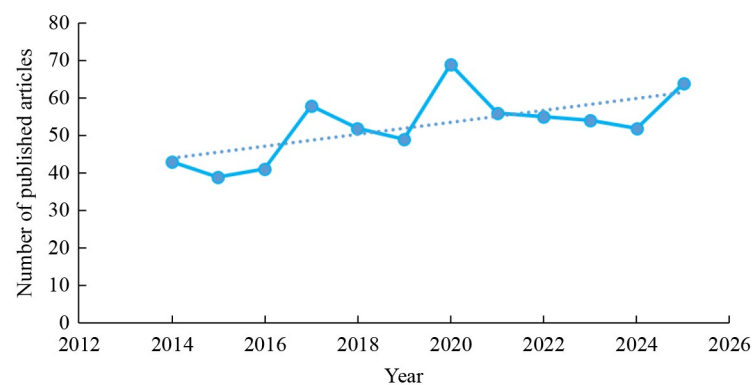


Fig. 2 The trend of the number of published articles in FASE.

views on the *FASE* WeChat Official Account and was reposted by 17 related accounts.

Scientific and technological innovation is a defining force of the modern world, and identifying engineering frontiers is essential to shaping the future of engineering science and technology. Since 2017, the CAE has led the Global Engineering Fronts Program (GEFP), convening CAE academicians and international agricultural scientists to identify major frontiers in global agricultural science and technology and support AGD<sup>[4,5]</sup>. Tracking and advancing these frontiers is vital to addressing global challenges and fostering sustainable human development. The GEFP is thus of great significance to both scientific progress and scholarly

publishing—serving national strategic needs while guiding disciplinary development and emerging research priorities<sup>[6–8]</sup>. Each year, we engage domestic and international experts to contribute insights and recommendations through the program, addressing practical agricultural challenges or keeping pace with major frontiers and hotspots. Among these, genome editing has consistently ranked among the top 10 Agricultural Engineering Frontiers identified by CAE from 2017 to 2021<sup>[9]</sup>. Drawing on GEFP-identified topics, the journal has actively promoted frontier themes through special issues<sup>[10]</sup>, including *Rhizobiont for high nutrient use efficiency*, *Sustainable and Environment-Friendly Agricultural Pest Management*, and *Genome Editing in Agriculture: Technology, Application and Regulation*.

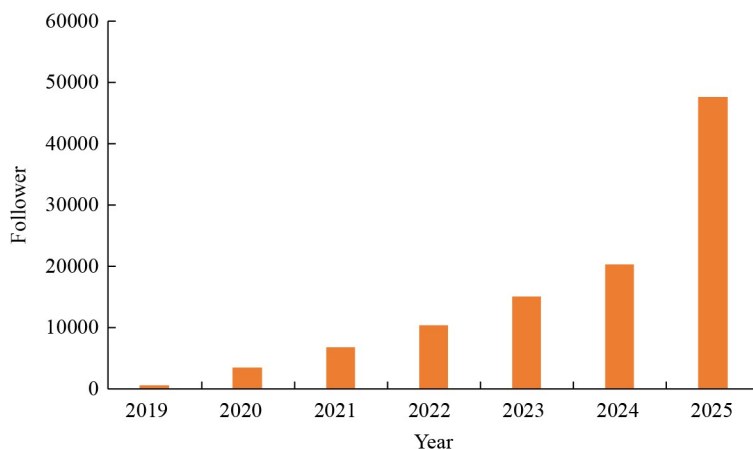


Fig. 3 Growth in followers of the FASE WeChat Public Platform in 2019–2025.

Looking ahead, *ENGINEERING Agriculture* will continue to uphold its founding mission of serving global agricultural research. Guided by a sharper vision as an ENGINEERING brand, driven by a more efficient publication pace, and supported by a more flexible knowledge dissemination mechanism, the journal will advance systematic innovation and sustainable development in agricultural sciences. It is dedicated to becoming:

• **A hub for transformative ideas in agriculture**

Cultivating original theories, disruptive technological frameworks, and cross-disciplinary integration models.

• **A showcase for cutting-edge technological breakthroughs**

Focusing on key areas such as smart agricultural systems, agricultural robotics and artificial intelligence, low-carbon agri-

food systems engineering, circular agricultural engineering, and green and sustainable agricultural development.

• **A platform for dialogue among global scholars**

Fostering in-depth exchanges among engineers, agronomists, environmental scientists, economists, and policymakers to collectively design blueprints for future agricultural systems.

We sincerely invite colleagues from the global academic community to join us on this new journey. We welcome your contributions of cutting-edge research, suggestions for special topics, or participation in the peer-review process—all efforts that will help shape this forward-looking academic platform. Let us work together to cultivate agricultural wisdom in the land and collectively address a core challenge of our time: how to harness the ENGINEERING Consortium to steer agriculture toward a more efficient, resilient, and sustainable future.

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