

Preface

It is with great pride that we present this special issue of *Pertanika Journal of Science and Technology*, featuring selected peer-reviewed articles from the International Conference on Agricultural and Food Engineering 2023 (CAFEi 2023). Themed “*Global Food and Agriculture Recovery in the Post-Pandemic World*,” this conference provided a platform for researchers, practitioners, and policymakers to explore innovative strategies to rebuild and strengthen the global agricultural and food systems in the wake of the COVID-19 pandemic.

This special issue reflects the interdisciplinary spirit of the conference, capturing diverse research aimed at addressing critical challenges in agriculture, food processing, and biosystems resource management. The featured articles exemplify the dedication of the research community in the South East Asia region in advancing sustainable and resilient solutions. Collectively, they demonstrate the conference’s emphasis on sustainability, innovation, and resilience in agricultural and food systems.

Highlights of this issue include:

- **Innovations in agricultural processing**, such as drying optimization of desiccated coconut and the development of pectin-pineapple juice films for sustainable food packaging.
- **Improvements in agricultural mechanization and labor ergonomics**, including the evaluation of harvesting baskets for male pineapple harvesters in Johor, Malaysia.
- **Advancements in sustainable construction materials**, as demonstrated by studies on chemical treatments on porous rice husk ash-based geopolymer foam to improve its strength.
- **Water resource management and irrigation system analyses**, exemplified by evaluations of the Taguibo River Irrigation System Diversion Dam and the water yield assessments in the Taguibo River Watershed Forest Reserve in the Philippines.
- **Development of practical engineering solutions**, such as the development of a testing rig for ram pump systems, which highlight the importance of accessible and efficient water management technologies for agricultural applications.

The collective efforts of the authors, reviewers, the journal's administrative team and the conference organizers have made this special issue possible and enriched the field of agricultural and food engineering. We hope this special issue will be a resource for researchers, practitioners, and policymakers alike, and inspire further innovation and collaboration to build a resilient and sustainable future for global agriculture and food systems.

Guest Editors

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