

Preface

The 2nd International Colloquium on Environment, Youth, and Sustainability 2023

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In the evolving era of globalization, various sectors of human life are undergoing profound changes. One highly influenced aspect is the bioproduction system, where biological products such as food, medicines, chemicals, and energy are produced through biotechnological and genetic engineering processes. The bioproduction system is an integral part of the global supply chain and plays a crucial role in meeting human needs.

Globalization has reshaped the way the world interacts and does business. Changes in information technology, transportation, and communication have reduced geographical barriers and opened opportunities for closer international collaboration. Alongside this, challenges such as climate change, sustainability of natural resources, and increasing demand for environmentally-friendly products drive scientists, researchers, and industries to seek new ways of managing the bioproduction system.

In this context, the question arises: how can the bioproduction system adapt to this era of globalization, and how can changes in economic, environmental, and social dynamics impact its processes and production? While globalization offers opportunities for broader market access, increased knowledge exchange, and cross-border innovation, it also presents new challenges in terms of regulation, ethics, and risk management.

In the advancing era of globalization, the younger generation holds a crucial role in shaping and guiding the future. One of the main challenges the world faces today is addressing climate change, fulfilling global food needs, and managing natural resources sustainably. Amidst the complexity of these challenges, the bioproduction system plays a crucial role in providing fundamental biological products for human life.

The younger generation holds significant potential to be a driving force in developing innovative solutions to the challenges faced by the global bioproduction system. They are growing up in an era where technology, information, and international collaboration are more accessible than ever before. The ability to communicate and work across borders enables new ideas to overcome constraints in biological production, optimize resource utilization, and create positive impacts on the environment and society.

Looking towards the future, it is important to explore the directions taken by the bioproduction system amidst these global changes. How will new technologies, such as advanced biotechnology, genetic engineering, and sustainable production, shape the bioproduction industry? How will environmental and conservation aspects be integrated into biological production processes? How can the distribution of benefits from the global bioproduction system be balanced to achieve justice and sustainability? Additionally, how can the involvement and role of youth in the bioproduction system serve as a driving force for the sustainability of the bioproduction system in the future?

Reflecting on the current state of globalization, the sustainability of the bioproduction system in the era of globalization and the engagement of youth in the bioproduction system become intriguing topics for discussion. Therefore, the Center for Environment and Sustainability Science (CESS) at Universitas Padjadjaran is organizing **the International Colloquium on Youth, Environment, and Sustainability under the theme "The Future of the Bioproduction System in a Globalized World."**