



Scopus®




IPB University  
Bogor Indonesia



# FISAED 2024

 HYBRID CONFERENCE

 WHIZ PRIME HOTEL  
BOGOR, INDONESIA

The Frontier in Sustainable Agromaritime  
and Environmental Development Conference

# Conference Proceedings

**“Frontier Agromaritime at the Cross-Road  
for Addressing Complex Issues”**



DKSRA Office, IPB University  
Kamper Street, IPB Dramaga, Bogor, Indonesia



[conference.ipb.ac.id/index.php/fisaed](https://conference.ipb.ac.id/index.php/fisaed)

## **Background**

The Frontier in Sustainable Agromaritime and Environmental Development Conference (FiSAED) 2024 is inspired by the emergence of Agromaritime 4.0, which integrates advanced technologies into agriculture and maritime practices to enhance sustainability and efficiency. This new paradigm focuses on leveraging digital innovations, such as the Internet of Things (IoT), artificial intelligence (AI), big data, and automation, to optimize resource management and production processes.

As the global population continues to grow, there is an urgent need to address challenges related to food security, climate change, and environmental degradation. Agromaritime 4.0 presents opportunities to create smarter, more resilient systems that can respond effectively to these challenges. The integration of technology in agromaritime sectors allows for precise monitoring of crops and marine environments, improved logistics, and more sustainable fishing and farming practices.

FiSAED 2024 aims to explore how Agromaritime 4.0 can revolutionize the industry by promoting sustainable practices that benefit both the economy and the environment. The conference will serve as a platform for sharing innovative research, best practices, and collaborative solutions among stakeholders from diverse fields. Through discussions on topics such as digital transformation, sustainable resource management, and the role of technology in enhancing environmental health, FiSAED 2024 seeks to foster international cooperation and drive collective efforts toward achieving sustainable development goals in the agromaritime sector.

## **Theme**

“Frontier Agromaritime at the Cross-Road for Addressing Complex Issues”

## **Subthemes**

### **Sustainable natural resources and environmental management**

Soil science and land resources  
Agronomy and Horticulture  
Plant Protection  
Landscape Architecture  
Fisheries and Marine Science  
Animal Science  
Forestry  
Environmental Science and Management  
Agrometeorology and Geophysics

### **Science and technology for sustainable agromaritime**

Mechanical and Biosystem Engineering  
Food Science and Technology  
Agroindustrial Technology  
Civil and Environmental Engineering  
Mathematics and Natural Sciences

## **Environmental health and ecosystems**

Veterinary Medicine  
Human Medicine  
Biomedical Sciences  
Nutrition Sciences  
One Health

## **Socio-economic transformation for sustainable agromaritime**

Agribusiness and Management  
Agricultural Economics and Development  
Resource and Environmental Economics  
Family and Consumer Sciences  
Communication and Community Development

### **The Objective**

The primary objective of proposing an international conference is to create a collaborative platform where experts, researchers, policymakers, and stakeholders can come together to discuss and address intricate challenges at the intersection of agriculture and maritime industries. This conference aimed to explore innovative solutions and best practices related to sustainability, resource management, and technological advancements in both sectors. By facilitating knowledge exchange and fostering partnerships, the conference sought to promote integrated approaches that enhance food security, environmental stewardship, and economic resilience in the agromaritime domain. Additionally, it provides a forum for cultural exchange and diplomacy, strengthening international cooperation toward achieving shared goals in addressing complex global issues.

### **The Participants**

Professionals  
Academics and Researchers  
Policymakers

### **The Advantages**

Knowledge Exchange  
Networking  
Exposure to Innovation  
Policy Insight  
Professional Development

### **Opening and Keynote Speakers**

#### **Opening Speech**

Prof. Dr. Arif Satria, SP., M.Si. (Rector of IPB University, Indonesia)

#### **Keynote Speakers**

Prof. Dr. Ir. Drajat Martianto, M.Si. (IPB University, Indonesia)



## **Invited Speakers**

### **Science and technology for sustainable agromaritime**

Wahyu Caesarendra, ST., M.Eng., Ph.D. (Opole University, Poland)

Dr.Ing. Azwirman Gusrialdi (Tampere University, Finland)

Dr. Nurul Huda (Universiti Sabah Malaysia, Malaysia)

### **Socio-economic transformation for sustainable agromaritime**

Ayu Pratiwi, Ph.D. (University of Turku, Finland)

Dr. Raden Dikky Indrawan, S.P., M.M. (IPB University, Indonesia)

Dr. Muhamad Abduh (Universiti Brunei Darussalam, Brunei Darussalam)

### **Sustainable natural resources and environmental management**

Dr. Kornorn Srikulnath (Kasetsart University, Thailand)

Dr. Davin H.E. Setiamarga (National Institute of Technology Wakayama, Japan)

Prof. Dr. Ir. Yusuf Sudo Hadi, M.Agr. (Papua New Guinea University of Technology, Papua New Guinea)

### **Environmental health and ecosystems**

Prof. Dr. Virginia M. Venturina (Central Luzon State University, Philippines)

Dr. Andrew Kan (University of NSW, Australia)

Kamuhelo Lisao, Ph.D. (University of Namibia, Ministry of Environment, Forestry, and Tourism Namibia, Namibia)

## **Date and Venue**

The 2024 Frontier in Sustainable Agromaritime and Environmental Development Conference (FiSAED) has been held on:

Date : Thursday-Friday, 19-20 December 2024

Time : 08.30 am - 05.00 pm

All Participants : Online

Committees : Whiz Prime Hotel, Bogor, Indonesia

Abstract Submission : <https://conference.ipb.ac.id/index.php/fisaed/>

Conference Website : <https://conference.ipb.ac.id/index.php/fisaed/index>

## **Committees**

### **Advisory Committee**

Prof. Dr. Ir. Ernan Rustiadi, M.Agr.

Prof. Dr. Ir. Anas Miftah Fauzi, M.Eng.

Prof. Dr. Ir. Drajat Martianto, M.Si.

Prof. Dr. Ir. Luky Adrianto, M.Sc.

Prof. Dr. Ir. Rizaldi Boer, M.S.

Prof. Dr. Ir. Arya Hadi Dharmawan, M.Sc.Agr.

### **Chairman**

drh. Mokhamad Fakhrol Ulum, M.Si., Ph.D.

## **Scientific Committee**

### **Head of Scientific Committee:**

Prof. Dr. Anuraga Jayanegara, S.Pt., M.Sc.

### **Members of Scientific Committee:**

Prof. Dr. Sugeng Heri Suseno, S.Pi., M.Si.  
Dr. Handian Purwawangsa, S.Hut., M.Si.  
Prof. Dr. Ir. Hermanu Triwidodo, M.Sc.  
Dr. Ir. Irdika Mansur, M.For.Sc.  
Dr. Alfian Helmi, S.KPm., M.Sc.  
Dr. Eng. Obie Farobie, S.Si., M.Si.  
Dr. drh. I Ketut Mudite Adnyane, M.Si.  
Dr. Karlisa Priandana, S.T., M.Eng.  
Dr.rer.pol. Mohammad Iqbal Irfany, S.E., M.App.Ec.  
Dr. Supriyanto, S.T.P., M.Kom.  
Dr. Roza Yusfiandayani, S.Pi.  
Dr. Yudi Chadirin, S.T.P., M.Agr.  
Dr. Eng. Wisnu Ananta Kusuma, S.T., M.T.  
Prof. Dr. Ing. Azis Boing Sitanggang, S.T.P., M.Sc.  
Prof. Dr. Syartinilia, S.P., M.Si.  
Dr. Kustiariyah, S.Pi., M.Si.  
Dr. Widyastutik, S.E., M.Si.

## **Finance**

Yeni Yuniarti, S.P.

Daryanto

## **Secretary**

Winni Liani Daulay, S.Pt., M.Si

Nabilah Zulfah Ramadhani

## **Marketing and Public Relation**

Faisal Ali, SP.

Jeffry Setiawan, S.Si.

Lia Maulianawati, A.Ma.

## **Advertising and Website**

Pangudi Citraning Putra, S.Komp., M.Kom.

Bunga Anggraeny, S.I.K., M.Si.

Muh. Firmansyah, S.T.P., M.Si.

Aprialdy Idrus, S.Pd., M.Si.

Muhammad Jaka Utama, S.Komp.

Asep Denda Is Purwanto

Puput Lestari, S.E., M.Si

Risa Nur Hidayah, S.E., M.Si

Sofia Octaviana, S.Mat.

**Publication and Documentation**

Sofyan, S.Si., M.Si.

Asep Syawaliansah, S.T, MM.

Sarah Alya Iqlima, S.T.

Sri Wahyuni, A.Md.

Ramdani, S.E.

Doddy Ramzani Anugerah Putra, S.K.H

Nelza Putri Yasmin, S.K.H



# FISA 2024

Kampus Merdeka



IPB University

Direktorat Kajian Strategis dan Reputasi Akademik

## Frontier in Sustainable Agromaritime and Environmental Development

Online: 19-20 DECEMBER 2024

## Frontier Agromaritime at the Cross-Road for Addressing Complex Issues



More information  
+62 822-9330-1487 (Aprialdy)

### Sub-Theme

1. Science and Technology for Sustainable Agromaritime
2. Socio-economic Transformation for Sustainable Agromaritime
3. Sustainable Natural Resources and Environmental Management
4. Environmental Health and Ecosystems

### Important dates

- Abstract submission: 9 Oct - ~~12 Nov 2024~~ (19 Nov 2024)
- Abstract acceptance notification: ~~15 Nov 2024~~ (22 Nov 2024)
- Registration and conference payment: 18 Nov (22 Nov-9 Dec 2024)
- Media submission: 18 Nov (22 Nov-9 Dec 2024)
- Online conference 19-20 Dec 2024
- Full paper submission: 23 Dec 2024-20 Jan 2025

### Fee details

Registration fee for presenter: 250K | 25 USD  
Participant only, with e-certificate: 100K | 10 USD  
Participant only, without e-certificate: 50K | 5 USD  
Conference (including publication) fee: 2.500K | 250 USD

#### Note:

- The final decision for publication is solely dependent on the publisher.
- If the full paper is rejected by the conference committee, the conference fee will be returned 100%
- If the publisher rejects the manuscript, no fee will be returned.
- Registration fee will not be returned



Register Now:  
<https://ipb.link/fisaed2024>

<https://dkasra.ipb.ac.id> dkasra\_ipb dkasra\_ipb 0813-8875-4005