



A PROPOSAL OF INTERNATIONAL HYBRID SEMINAR

"INNOVATION IN CLIMATE
CHANGE ADAPTATION FOR
COASTAL AND DELTA AREAS"



JANUARY 6TH 2025

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FACULTY OF ENGINEERING
UNIVERSITAS ISLAM SULTAN AGUNG
2025

I. Background

Climate change, a term often referred to as "climate change," is an environmental issue that has emerged as a critical concern, drawing significant attention from various stakeholders. The concept of climate change, as defined by the Intergovernmental Panel on Climate Change (IPCC, 2001), encompasses any climate variation over a specific period, whether driven by natural factors or human activities (anthropogenic). Its impacts include global temperature rise, altered precipitation patterns, increased frequency of natural disasters, and ecosystem degradation.

Coastal and delta regions are ecosystems particularly vulnerable to the effects of climate change. Rising sea levels, erosion, saltwater intrusion, and intensified storm activity pose tangible threats to environmental sustainability and the livelihoods of communities in these areas. Given their importance as hubs of biodiversity and economic resources, innovative climate adaptation strategies are essential to protect these ecosystems and support the well-being of the populations reliant on them.

As climate change represents a global challenge with direct implications for various aspects of sustainable development, addressing it lies at the core of many Sustainable Development Goals (SDGs). Goal 13 specifically calls for urgent action to reduce emissions, enhance adaptation, and strengthen resilience against climate disasters. Moreover, the impacts of climate change also intersect with other goals, such as food security (Goal 2), clean water availability (Goal 6), and biodiversity (Goal 15). Tackling this issue necessitates cross-sectoral approaches and global collaboration, as emphasized in Goal 17, which advocates for international partnerships in technology, funding, and innovative policies.

By integrating climate action into all facets of development, the world can craft solutions that address environmental crises while promoting social equity and economic well-being for all. Through robust partnerships among governments, the private sector, and the international community, resources can be mobilized, technologies shared, and capacities built to foster innovative solutions. The combination of effective climate action and inclusive global collaboration is key to achieving a more just and sustainable future for generations to come.

In this context, adapting to climate change becomes crucial to maintaining environmental balance and sustaining livelihoods. Through the international seminar themed "Environmental Adaptation to Climate Change," the Faculty of Engineering, Unissula, aims to provide a platform for discussions involving academics, researchers, practitioners, and policymakers to exchange knowledge, experiences, and innovative solutions for environmental adaptation to climate change.

II. Aim

1. Contributing to Climate Change Mitigation.

Encourage action-oriented initiatives to address climate change impacts and align with international commitments like the Paris Agreement.

2. Establishing Communication and Collaboration

Build and strengthen global and regional partnerships, fostering collaborative research, innovation, and implementation of sustainable practices.

III. Objective of The International Seminar

1. To Identify Key Challenges

Understand the major issues faced by coastal and delta regions due to climate change, including rising sea levels, erosion, saltwater intrusion, and increased storm intensity.

2. To Explore Innovative Solutions

Develop actionable strategies and solutions for environmental adaptation specific to coastal and delta areas using science and technology.

3. To Enhance International Collaboration

Promote knowledge-sharing and partnerships among governments, academia, private sectors, and local communities to create sustainable and impactful climate adaptation measures.

IV. Speakers and Topics

1. Dr. Hanif Faisol Nurofiq, S.Hut., M.P.

Minister of Environment of the Republic of Indonesia

Presentation on national policies and strategic frameworks for mitigating climate change and enhancing adaptation measures within Indonesia.

2. Prof. Dr. Floris Boogard & Prof. Eric Boer

Hanze University of Applied Science – The Netherlands

Case study on advanced water management systems, innovative flood control methods, and sustainable urban planning to address climate challenges in the Netherlands.

3. Prof. Dr. Theis Andersen & Prof. Rikke Markfoged

VIA University College - Denmark

Insights into Denmark's approach to climate resilience through renewable energy integration, sustainable infrastructure, and community-based solutions.

4. Prof. Dr. Slamet Imam Wahyudi

Universitas Islam Sultan Agung - Indonesia

A comprehensive discussion on flood disaster mitigation, including the development of adaptive infrastructure and policies in the context of Indonesia's vulnerability to climate change.

V. Expected Outcomes

- 1. A practical framework for addressing climate change in Indonesia, including actionable strategies and policy recommendations.
- 2. A comprehensive documentation of international best practices from case studies in the Netherlands and Denmark.
- 3. Enhanced collaboration among stakeholders in coastal and delta regions for climate adaptation and resilience-building.
- 4. Identification of new opportunities for technological innovation and funding to support climate adaptation initiatives.

VI. Engaged Communities

1. Speaker:

- Minister of Environment of the Republic of Indonesia
- Experts in the fields of water management system, urban planning, renewable energy, sustainable infrastructure and Hydrology from the Netherlands, Denmark and Indonesia

2. Participants:

- Central Java Provincial Environmental Service
- Environmental Agency in Regency and Cities in Central Java Province
- Department of Public Works, Water Resources and Spatial Planning, Central Java Province
- BBWS Pemali Juana
- Central Java Regional Settlement Infrastructure Center (Balai Prasarana Permukiman Wilayah Jawa Tengah)
- Academics and students from Universities in Central Java
- NGO

VII. Format and Schedule of Activities

The seminar will be a hybrid international event held both offline and online to ensure accessibility for participants worldwide. The event will feature keynote addresses, panel discussions, and interactive sessions to foster knowledge exchange and collaboration. The International hybrid seminar will be held on:

Date: Monday, January 6, 2025

Venue : Seminar Room, 2nd Floor, Faculty of Engineering, UNISSULA

Link for join Virtual room: https://bit.ly/zoomIHS2025

VIII. Tentative Agenda

1. Opening Session

Welcome Address: By the Rector of UNISSULA, emphasizing the importance of climate adaptation.

- 2. Plenary Session
 - a. The Speakers: Presentations by all distinguished speakers.
 - b. Panel Discussion: Interactive discussions among experts and participants on adaptation strategies.
- 3. Closing Session
 - a. Summary and Conclusions: Highlights of the discussions and key takeaways.
 - b. Certificate Presentation: Acknowledgment of speakers and participants.
 - c. Group Photo Session: Commemorative closing activity.

VIII. Conclusion

This seminar aspires to be a pivotal platform for strengthening international collaboration, raising awareness, and promoting innovation in climate change adaptation, particularly for vulnerable coastal and delta regions. We warmly invite policymakers, academics, practitioners, and all parties concerned with the sustainability of these regions to participate and contribute to a shared vision for a better future.

Contact Information

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We look forward to your participation and valuable contributions!