

Photo: Toshifumi Matsumoto

Invited Speech Session (9:30 - 11:15)

### **Frontiers of Disasters and Human Security**

- Environmental Risks and Human Security
  Dr. Jakob Rhyner (United Nations University Vice Rectorate in Europe)
- Understanding Disaster Risk for Increasing Human Security
   Dr. Matthias Garschagen (United Nations University Institute for Environment and Human Security)
- Enhancing Human Resilience for Disaster Risk Reduction
  Dr. Joerg Szarzynski (United Nations University Institute for Environment and Human Security)
- Recent Scientific Advances on Ecosystem-Based Coastal Defenses
   Dr. Fabrice Renaud (United Nations University Institute for Environment and Human Security)
- Tackling Societal Challenges through International Collaboration
  Dr. Dilanthi Amaratunga (Professor, University of Huddersfield, United Kingdom)
- Tuberculosis: Clear and Present Danger at Natural Disasters
  Dr. Yasuhiko Suzuki (Professor, Hokkaido University Research Center for Zoonosis Control)

Implicit Role Playing Game (11:30 - 13:30)

## Role of Dikes in Protecting Coastal Villages from Tsunami

Dr. Shinobu Kitani, Dr. Dinil Pushpalal, Atsushi Suzuki, Mizuki Aizawa (Tohoku University)

"An interactive event brings together the audience and stakeholders of Great East Japan Earthquake to discuss the role of dikes in protecting coastal villages from tsunami"



Photo : Tomoyuki Miura

Information and Registration: http://human-security.jp/posts/3961

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# Invited Speech Session (9:30 - 11:15) Frontiers of Disasters and Human Security

Moderator: Dr. Peter John Wanner (Graduate School of International Cultural Studies, Tohoku University)

Welcome Speech: Dr. Daisuke Komori (Representative Coordinator, Human Security Program, Tohoku University)

Guest Speech: Hj. Illiza Sa'aduddin Djamal, S.E. (Mayor of Banda Aceh City, Indonesia)



Environmental Risks and Human Security Professor Jakob Rhyner

UNU Vice Rectorate in Europe, Institute for Environment and Human Security

The presentation gives a short overview the current research on environmental risks, in the context of the Post-Hyogo Framework. It particularly emphasizes the view that these risks can't be understood as purely "natural" risks, but only in the interaction with human society.



Understanding Disaster Risk for Increasing Human Security
Dr. Matthias Garschagen

United Nations University Institute for Environment and Human Security

The need to better understand the drivers and causal fabric of disaster risk has been emphasized in the Hyogo Framework for Action and other important policy documents. The presentation discusses key achievements that have been made and explores remaining knowledge gaps.



Enhancing Human Resilience for Disaster Risk Reduction

Dr. Joerg Szarzynski

United Nations University Institute for Environment and Hum

**United Nations University Institute for Environment and Human Security** 

The presentation will provide an overview about UNU's international activities and best practices in the field of education and capacity development for disaster risk reduction and emergency preparedness covering face-to-face courses and technology enhanced learning for academia and practitioners.



Recent Scientific Advances on Ecosystem-Based Coastal Defenses

Dr. Fabrice Renaud

**United Nations University Institute for Environment and Human Security** 

The presentation will showcase recent scientific advances that have been published related to the protection of coastal zones with so-called green infrastructures. We will show recent progress made by various research groups in quantifying this role but also in developing guidelines for practitioners.



Tackling Societal Challenges Through International Collaboration: Disasters and Human Security Perspectives

**Professor Dilanthi Amaratunga** 

Global Disaster Resilience Centre, University of Huddersfield, UK

Tackling societal challenges through international collaboration is recognised as a significant measure for securing global competitiveness in this context, this presentation will focus on global challenges and research priorities associated with disasters for EU-South Asia cooperation, within the context of human security.



### Tuberculosis: Clear and Present Danger at Natural Disasters Professor Yasuhiko Suzuki Hokkaido University Research Center for Zoonosis Control

Tuberculosis (TB) is an important re-emerging infectious disease, which causes around 9 million new cases and 1.1 million deaths globally. Due to its communicable infectious nature, the efficient control of TB at natural disasters such as earthquake, Tsunami and Typhoon seems to be crucial. This presentation focuses on this issue.

# Implicit Role Playing Game (11:30 - 13:30) Role of Dikes in Protecting Coastal Villages from Tsunami

(Organized by faculty and students of 6 different institutions of Tohoku University)

In the reconstruction agenda after 3.11 Great East Japan Earthquake and Tsunami, the role of dikes in protecting villages from tsunami has become a major debate among the stakeholders. The vast network of supersized sea walls, mocked by some as "the Great Wall of Japan," is already underway and would stretch 370 km and cost nearly \$8 billion. Now the government of Miyagi prefecture is building a sea wall more than 9 m high. Opponents say the walls — although financed by the national government — would saddle local governments with crushing maintenance costs.

This role play forwards four local residents from coastal regions of Miyagi Prefecture, such as Kesennuma, Minamisanriku, and Higashimatsushima, who experienced various damages during the tsunami. They will argue through their own opinions about sea walls. The participants will be separated to four different groups, encircling a local resident and join the discussion. This event provides the participants a chance not only to think impartial but also to think from the position of the local residents.

Co-producers: Shinobu Kitani, Dinil Pushpalal (Graduate School of International Cultural Studies)

<u>Director</u>: Atsushi Suzuki (Graduate School of International Cultural Studies)

**Investigator**: Mizuki Aizawa (Faculty of Agriculture)

#### **Facilitators**

- 1) Mizuki Aizawa (Faculty of Agriculture)
- 2) Tomonori Ishikawa (Graduate School of International Cultural Studies)
- 3) Takako Honda (Faculty of Education)
- 4) Satoshi Kawamorita (Graduate School of Engineering)

#### **Virtual Players**

- 1) Jessie Wannerkawahara (Graduate School of International Cultural Studies)
- 2) Yuni Nurul Azzizah (Graduate School of International Cultural Studies)
- 3) U-Nichols A. Manalo (Graduate School of Agricultural Science)
- 4) Prasojo Bayu Suwondo Putro (Graduate School of Agricultural Science)

#### Reporters

- 1) Oscar Radyan Danar (Graduate School of International Cultural Studies)
- 2) Hatsuko Pushpalal (Faculty of Law)

#### **Real Players/Local Residents**



Setsuro Sugawara
Assemblyman of Higashimatsushima City

He was on duty when 3.11 tsunami hit the city and lost his immediate family members. His family home and the properties were fully destroyed by tsunami.



Yukio Ono Assemblyman of Higashimatsushima City

He was in his home when 3.11 tsunami hit the city. He managed to survive miraculously by climbing to a hill located behind his home. His home and the guest house were fully destroyed by tsunami.



Hirofumi Gyoba

Chairperson of Oyster Farmers Association, Shizugawa, Minamisanriku, Miyagi Prefecture

He was in his home when 3.11 tsunami hit the city and lost three ships and his family home. He is still living in a temporary housing scheme.



Tomoyuki Miura

NPO Kesennuma Town Development Support Center

He was working at a cram school when 3.11 tsunami hit the city and lost his mother. His family home and the properties were fully destroyed by tsunami.

#### **SCHEDULE**

- An Introduction to the Debate over Dikes (10 min.)
   Dr. Dinil Pushpalal (Professor, GSICS, Tohoku University)
- Video on Higashimatsushima City (10 min.)
- Self-introduction by real players (20 min.)
- Group discussion (30 min.)
- Summarization of discussions by each facilitator (8 min.)
- Participants/virtual players' opinions (8 min.)
- Question & Answer (10 min.)
- Impression of real players (5 min.)

Special Movie

Message from Higashimatsushima City

To create a future in which the story of the disaster will continue to be told

Copyright: Higashimatsushima City

Tabula University International Programs

Final University International Programs

Resulting Result

Comments (5 min.): Dr. Ella Meilianda (Program Manager, TDMRC, Syiah Kuala University, Banda Aceh, Indonesia)
 Dr. Joerg Szarzynski (Education Program Director, UNU-EHS, Bonn, Germany)

Joint organizers, Tohoku University International Post-Graduate Program in Human Security and United Nations University Institute for Environment and Human Security (UNU-EHS) are very grateful to you for joining with this public forum. Please visit our webs in near future for the feedback of the Role Playing Game.