

Second circular

## RIHN 12th International Symposium

# Trans-scale Solutions for Sustainability

December 20 - 21, 2017

Venue: Kyoto International Conference Center, Kyoto, Japan

The Research Institute for Humanity and Nature  
National Institutes for the Humanities  
Inter-University Research Institute Corporation

## **OBJECTIVE**

In this symposium, we discuss new approaches towards a sustainable future, focusing on the conflicts of resources, values, and governances among stakeholders across time and space. Behind the current understanding of the local tragedy of commons there exist trans-spatial issues such as local, national and global scale conflicts/synergy, as well as trans-temporal issues encompassing past, present and future, which need to be identified and solved. Analysis of the conservation and development of natural, social and institutional capitals is key to new directions of research. In particular, water and water-related issues under the conditions of climate change and shortage of land will be highlighted with scenario developments, and with the use of integrated indices and socio-ecological-economic models.

## **Session Scopes**

### **Session 1 Trans-spatial Connections**

(Local-regional-global connection, Climate-Hydro- Ecosystem-Economic connections)

In this session, we will focus on the synergy/conflicts of multi-resource utilizations among spatial scales. Interlinkages among multi-resources and conflicts over resources, including ecological resources, among those stakeholders who utilize them are key issues to be solved to attain sustainable resource utilization. Such a synergy/conflict structure may exist across spatial scales, from the local between urban and suburban areas, to the global through international trade. We would like to discuss the possibilities to develop technology to analyze this complicated structure of the interlinkages among spatial scales, and models or scenarios with new approaches.

### **Session 2 Trans-temporal Connections**

This session will discuss research perspectives to make fuller use of future projection for today's decision making. When decisions are made for future planning, they have been done at scales smaller than the country level, and goals for the residents' wellbeing were set only in a short-term perspective. To achieve the sustainability of the entire earth, however, more emphasis should be put on environmental sustainability involving a broader range of stakeholders and longer temporal and greater spatial dimensions, and this applies to local decision making as well. We try to identify the key elements to fill this gap, for example, by 1) finding good indices, other than economical values, which make it possible to convert long-term sustainability into short-term target relevant to planning, 2) understanding the nature of human being in terms of sense of values about future generations and 3) integrating the possible causal-interactions between present decision and future environmental status, with which we try to clarify the necessary elements and conditions to develop scenarios which can bridge the gap.

### **Session 3 Social Responses to Tipping Points**

In this session, we consider the notion of tipping points in both trans-spatial and trans-temporal terms, focusing on the methodological question of how to identify the critical moments of social responses to tipping points on natural resources. They include the surge of citizen's movements, and policy and institutional changes, as well as deeper changes in values, norms and principles, some of which involve a very long period of time. We take up water and water-related issues as a case study, and invite discussions on the possible applications of these research findings to tipping points in other spheres.

## PROGRAM

### Wednesday – December 20, 2017

#### Plenary Session

Chair: **Makoto Taniguchi** (RIHN)

10:00- 10:05 Welcome and Introduction to Plenary Session  
**Makoto Taniguchi**

10:05- 10:15 Opening Remarks  
**Tetsuzo Yasunari** (Director-General, RIHN)

10:15-11:20 Keynote Address  
**Peter Verburg** (Vrije Universiteit Amsterdam, Netherlands)

11:20-12:30 Lunch

#### Session 1 **Trans-spatial Connections**

Chair: **Ichiro Tayasu** (RIHN)

12:30- 12:45 Introduction to Session 1  
**Ichiro Tayasu** (RIHN)

12:45-13:15 **Carol Kendall** (U.S. Geological Survey, USA [emeritus])

13:15-13:45 **Keiichiro Kanemoto** (Shinshu University)

13:45-14:15 **Aiko Endo** (RIHN)

14:15-14:30 Coffee Break

14:30-15:00 **Yoshihide Wada** (IIASA, Austria)

15:00-16:00 Roundtable Discussion  
Chair: **Tohru Nakashizuka** (RIHN)  
The above speakers, Jiaguo Qi (Michigan State University, USA) and  
Nobuhito Ohte (Kyoto University)

17:00- Reception

## **Thursday – December 21, 2017**

### **Session 2      Trans-temporal Connections**

Chair: **Reiichiro Ishii** (RIHN)

9:00-9:05      Introduction to Session 2  
**Reiichiro Ishii** (RIHN)

9:05-9:35      **Reiichiro Ishii** (RIHN)

9:35-10:05      **Garry Peterson** (Stockholm Resilience Centre, Sweden)

10:05-10:35      **Shunsuke Managi** (Kyushu University)

10:35-10:50      Coffee Break

10:50-11:20      **Kiyoshi Takahashi** (National Institute for Environmental Studies)

11:20-12:10      Roundtable Discussion  
Chair: **Tatsuyoshi Saijo** (RIHN)  
The above speakers

12:10-13:10      Lunch

### **Session 3      Social Responses to Tipping Points**

Chair: **Makoto Taniguchi** (RIHN)

13:10-13:15      Introduction to Session 3  
**Makoto Taniguchi** (RIHN)

13:15-13:45      **Makoto Taniguchi** (RIHN)

13:45-14:15      **Victor Galaz** (Stockholm Resilience Centre, Sweden)

14:15-14:45      **Juan Castilla** (CSIRO, Australia)

14:45-15:00      Coffee Break

15:00-15:50      Roundtable Discussion  
Chair: **Kaoru Sugihara** (RIHN)  
The above speakers and Line Gordon (Stockholm Resilience Centre, Sweden)

## **General Discussion**

Chair: **Makoto Taniguchi** (RIHN)

15:50-16:40    Session summaries and discussion across all sessions

16:40-16:45    Closing Remarks  
**Jumpei Kubota** (RIHN)