

このシンポジウムでは、時間と空間を超えて、ステークホルダーの間における資源、価値やガバナンスにおけるコンフリクトに焦点を当てた、持続可能な未来への新たなアプローチについて考えます。

現状の、地域におけるコモンズの悲劇に対する理解の背後には、認識され解決されるべき、地域・国・地球規模の間のコンフリクトやシナジーのような超空間的な課題や、過去・現在・未来を包含する超時間的な課題が存在します。そのなかで、自然・社会・制度的な資本・資源の保護、またその開発についての分析が新たな研究の方向性への鍵となります。

ここでは特に、シナリオ開発や統合化指標、社会-環境-経済モデルを利用して、気候変動や土地不足状況下での水関連の課題を取り上げます。

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.

持続可能性における スケールと境界

— 真の問題解決をめざして —

Trans-scale Solutions for Sustainability

December **20-21**, 2017

Language

English

日本語同時通訳あり

国立京都国際会館 ルーム D

Room D, Kyoto International Conference Center

〒606-0001 京都市左京区宝ヶ池
Takaragaike, Sakyo-ku, Kyoto 606-0001 Japan

Keynote Address

**Pathways to Global Sustainability:
Multi-scale Tradeoffs**



Peter Verburg

Vrije Universiteit Amsterdam, Netherlands

Session 1

空間を超えた関係性
Trans-spatial Connections

Session 2

時間を越えた関係性
Trans-temporal Connections

Session 3

**ティッピングポイント
への社会的対応**
Social Responses to Tipping Points

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Applied Systems Analysis



Future Earth
Research Unit, Kyoto University

Wednesday, December 20, 10:00 - 16:00

Plenary Session

Keynote Address

Pathways to Global Sustainability:
Multi-scale Tradeoffs



Peter Verburg

Vrije Universiteit Amsterdam, Netherlands

Session 1

空間を超えた関係性
Trans-spatial Connections

Chair: **Ichiro Tayasu** RIHN

Trans-spatial Connections and Environmental
Traceability Methods

Ichiro Tayasu RIHN

Isotopes and Isoscapes: Tools for Understanding and
Explaining Spatial and Temporal Variations in Local
Ecosystems and Suggesting Solutions to Global
Environmental Issues

Carol Kendall U.S. Geological Survey, USA [emeritus]

Mapping the Carbon, Air Pollution, and Biodiversity
Footprints of Nations: A GIS + GLOBAL SUPPLY
CHAINS

Keiichiro Kanemoto Shinshu University

Understanding Integration with Nexus Approach

Aiko Endo RIHN

Towards Integrated Solutions for Water, Energy, and
Land Using an Integrated Nexus Modeling Framework

Yoshihide Wada

International Institute for Applied Systems Analysis (IIASA), Austria

Roundtable Discussion

Chair: **Tohru Nakashizuka** RIHN

Jianguo Qi Michigan State University, USA

Nobuhito Ohte Kyoto University

Thursday, December 21, 9:00 - 16:40

Session 2

時間を越えた関係性
Trans-temporal Connections

Chair: **Reiichiro Ishii** RIHN

Towards the Reconciliation between the Regional
Plannings and the Global Projections of Future
Environmental Sustainability

Reiichiro Ishii RIHN

Tipping Points in the Anthropocene: Drivers,
Connections, and Impacts

Garry Peterson Stockholm Resilience Centre, Sweden

Inclusive Wealth Report 2018

Shunsuke Managi Kyushu University

Integrated Analyses of Climate Policies for Simultaneous
Realization of the Paris Agreement and the SDGs

Kiyoshi Takahashi National Institute for Environmental Studies

Roundtable Discussion

Chair: **Tatsuyoshi Saijo** RIHN

Izuru Saizen Michigan State University, USA

Yoshihiko Wada Doshisha University

Session 3

ティッピングポイントへの社会的対応
Social Responses to Tipping Points

Chair: **Makoto Taniguchi** RIHN

Social Decisions to the Water-Energy-Food Nexus

Makoto Taniguchi RIHN

Taking Social Responses to "Tipping" Points Seriously
- Challenges and Opportunities

Victor Galaz Stockholm Resilience Centre, Sweden

The Groundwater Commons Game: Cultural Values,
Tipping Points, and Sustainable Pathways towards
Groundwater Conservation

Juan Castilla

Commonwealth Scientific and Industrial Research Organization (CSIRO), Australia

Roundtable Discussion

Chair: **Kaoru Sugihara** RIHN

Line Gordon Stockholm Resilience Centre, Sweden

Tetsuya Hiyama Nagoya University

General Discussion

Session summaries and discussion across all sessions

Inquiry

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Venue

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▶ 最寄り駅

地下鉄烏丸線「国際会館駅」から徒歩5分

▶ From the closest station

5-minute walk from Kokusaikaikan
Station on the Karasuma
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