

RIHN 7th International Symposium

Complexification and Simplification:

Ecosystems, human health and lifestyle in Asia

October 24 - 26, 2012

Kyoto, Japan

Organized by

The Research Institute for Humanity and Nature (RIHN)

National Institutes for the Humanities (NIHU)

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PREFACE

Asian social, economic, demographic and ecological systems are in a process of collective complexification. The region is home to two-thirds of the global population and contains a majority of the world's megacities and some of the fastest growing populations and economies, but also notable cases of population decline and economic stasis. Asia is a region of ecological munificence and many traditional livelihood systems of great longevity and productivity. As a whole, the region is increasingly interdependent, as foreign investment, infrastructure development, migrations, and collective reliance on shared biomes and resources bind it ever-more tightly together; change in one place or system inevitably leads to change in others.

Paradoxically, such complexification often leads to simplification. Across Asia, monocultures displace diverse ecologies, simple wages displace diversified livelihoods, and complex ecosystems are subject to single-purpose management regimes. Longstanding social-ecological systems appear increasingly vulnerable to short-sighted decisions and in danger of rapid shifts to new, less resilient states.

Development is a process of environmental transformation, as ever. And yet, transformation of ecological service into economic benefit may not serve the greatest good. What grounds or principles can link culturally relevant description of human well-being to the local, regional and global ecosystems on which human societies ultimately rely?

Drawing from extensive field research conducted in tropical and temperate forests, highlands and steppe grasslands, this symposium approaches the twin problems of complexification and simplification in Asia through three key axes of social-ecological change: resource use, ecological change, and human lifestyle and health.

Session Program

Session 1: Collapse and restoration of social-ecological networks

The first session examines social-environmental interactions in India, Mongolia and Malaysia where humans are dramatically altering ecosystems. Case studies addresses changes in biodiversity and ecosystem services associated with land cover changes, and potential ways toward sustainable use of ecosystem services in each region. Similarity and differences in the interactions among regions will be discussed.

Session 2: Physiological adaptation and recent lifestyle change in high-altitude environments

The second session addresses the health and livelihood issues posed by high altitude environments, where human physiological and cultural adaptations to the harsh environment complicate newly emerging lifestyle-related medical problems. Case studies from Bhutan and Tibet will be used to explore a desirable balance of environment, lifestyle and public health.

Session 3: Ecohealth: Ecological transformation and human health

The third session examines the effect of climate and environmental and social change on the ecology of human infectious disease in Lao PDR, Vietnam, Bangladesh and China. Case studies will describe ecologically based insights for the evaluation and control of infectious disease in relation to both local and global environmental change.

PROGRAM

Wednesday – 24 October, 2012

Opening Session

Chair: Aysun UYAR (*RIHN*)

- 10:00-10:10 Opening Remarks
TACHIMOTO Narifumi (*Director-General, RIHN*)
- 10:10-10:20 Objectives of the Symposium
Daniel NILES (*RIHN*) / **ABE Ken-ichi** (*RIHN*)
- 10:20-11:20 Keynote Address 1
Biodiversity and Public Health: A Complicated but Important Science
– Policy Challenge
Pim MARTENS (*Maastricht University, The Netherlands*)
- 11:20-11:30 Coffee break
- 11:30-12:30 Keynote Address 2
Theoretical Frameworks for the Analysis of Social-Ecological Systems
Graeme S. CUMMING (*University of Cape Town, South Africa*)
- 12:30-14:00 Lunch

Session 1 Collapse and restoration of social-ecological networks

Chair: YAMAMURA Norio (*RIHN/Doshisha University, Japan*)

14:00-14:40 Reshaping Neighbourhood Parks for Biodiversity and People:
A Case of Unsung Socio-Ecological Systems in Bangalore, India

M. Soubadra DEVY

(*Ashoka Trust for Research in Ecology and the Environment (ATREE), India*)

14:40-15:20 Co-benefits of Sustainable Forestry

KITAYAMA Kanehiro (*Kyoto University, Japan*)

15:20-16:00 Interaction of Human Activities and Ecological Resources: Focusing
on the Changes of Peoples Living Environment in Malaysia

KATO Yumi (*RIHN/JSPS*)

Land Use Change and Loss of Biodiversity in Malaysian Borneo

TAKANO Takenaka Kohei (*RIHN*)

16:00-16:20 Coffee break

16:20-17:00 Relationship between Livestock and Pasture in Mongolia

KODA Ryosuke (*RIHN*)

Quantitative Comparison of Sustainability between Nomadic and
Sedentary System in Mongolian Pasture

KATO Satoshi (*RIHN*)

17:00-17:30 Discussion

Thursday – 25 October, 2012

Session 2 Physiological adaptation and recent lifestyle change in high-altitude environments

Chair: OKUMIYA Kiyohito (*RIHN*)

10:00-10:30 Three Patterns in Hypoxic Adaptation in the Three High-Altitude
People and its Evolutional Significance

Cynthia M. BEALL (*Case Western Reserve University, USA*)

10:30-11:00 Aging in High Altitudes: Possible Association with Adaptation
Methods

SAKAMOTO Ryota (*Kyoto University, Japan*)

11:00-11:30 Changing Livelihood and Non-Communicable Diseases in the Kingdom
of Bhutan: Physiological Adaptation and Recent Lifestyle Change in
High-Altitude Environments

Ugen DOPHU (*Ministry of Health, Bhutan*)

11:30-11:50 Coffee break

11:50-12:20 Tibetan Society and their Changing Livelihoods

Melvyn C. GOLDSTEIN (*Case Western Reserve University, USA*)

12:20-12:40 Discussant: **INAMURA Tetsuya** (*Aichi Prefectural University, Japan*)

12:40-13:10 Discussion

13:10-14:30 Lunch

Session 3 Ecohealth: Ecological transformation and human health

Chair: MOJI Kazuhiko (*RIHN*)

- 14:30-15:10 Climate, Climate Change and Human Health
HASHIZUME Masahiro (*Nagasaki University, Japan*)
- 15:10-15:50 Liver Fluke and Cholangiocarcinoma in Southeast Asia:
Current Status and Prospects for Long Term Prevention and Control
Paiboon SITHITHAWORN (*Khon Kaen University, Thailand*)
- 15:50-16:10 Coffee break
- 16:10-16:50 Study of Land Cover Change in Relation with Malaria and Liver-Fluke
Infection in Savannakhet Province, Lao PDR
TOJO Bumpei (*RIHN*)
- 16:50-17:30 Cooking Up: a Nutrition Lens on Natural Resource Management
Jutta KRAHN (*Consultant Food, Nutrition, Natural Resources, Laos*)
- 17:30-18:00 Discussion

Friday – 26 October, 2012

Session 4 Synthesis and Summary Discussion

Chairs: Daniel NILES (*RIHN*)

10:00-10:15 Synthesis of session 1
SAKAI Shoko (*RIHN*)

10:15-10:30 Synthesis of session 2
OKUMIYA Kiyohito (*RIHN*)

10:30-10:45 Synthesis of session 3
MOJI Kazuhiko (*RIHN*)

10:45-11:00 Coffee break

11:00-11:20 Comments
Pim MARTENS (*Maastricht University, The Netherlands*)
Graeme S. CUMMING (*University of Cape Town, South Africa*)

11:20-11:45 Summary Discussion

11:45-11:50 Closing Remarks
SATO Yo-Ichiro (*Deputy Director-General/Director of CCPC, RIHN*)

11:50-12:25 Publication meeting

12:25-14:00 Lunch

14:00- Excursion