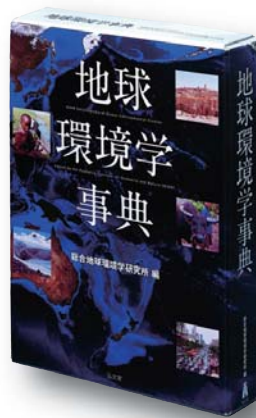


## Science Communication

As a national research institute, RIHN is expected to conduct exemplary science; it also must communicate its research agenda and results to the public and contribute to public awareness and discussion of contemporary environmentalism. A number of public symposia, campaigns, seminar series, and publications are designed to reach specialist and general audiences.



RIHN International Symposium

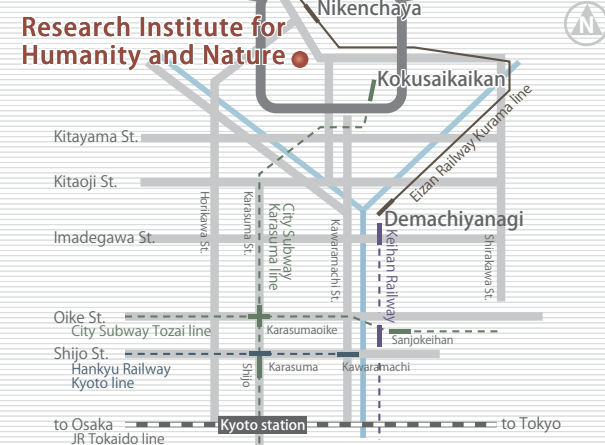
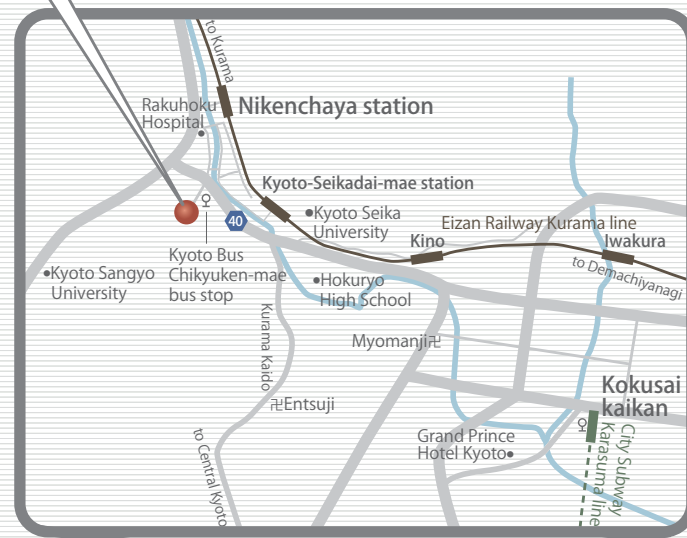


The RIHN Encyclopedia of Global Environmental Studies was published in 2010 to commemorate RIHN's 10th anniversary.

## Main Events

- RIHN Public Seminars**  
 Eight public seminars will be held in fiscal year 2011.
- RIHN 9th Area Seminar** (Co-hosted with Hokkaido University)  
 People and Nature in Eastern Eurasia: Twenty years after the Soviet Union  
 12 June, 2011 Hokkaido University
- RIHN 10th Forum**  
 Reflections on the Water Around Us  
 3 July, 2011 Kyoto International Conference Center
- NIHU 17th Open Lecture and Symposium** (Co-hosted with NIHU)  
 7 October, 2011 Kyoto International Conference Center
- RIHN 6th International Symposium**  
 Beyond Collapse  
 26-28 October, 2011 RIHN Lecture Hall
- The Earth Forum Kyoto International Symposium**  
 (Co-hosted with Kyoto Prefecture and others)  
 February, 2012 Kyoto International Conference Center

Photo JASHENKO, Roman



- By City Subway**  
 From Kyoto Station, take the Karasuma Line to Kokusaikaikan Station (the last station), and transfer to Kyoto Bus as below.
- By Kyoto Bus**  
 From Kokusaikaikan Station, take bus No. 40 or 50 to Chikyuken-mae. RIHN is at the base of the hill to your left.
- By Eizan Railway**  
 From Demachiyangi Station in Kyoto City, take the Kurama line. Exit at Nikenchaya Station. RIHN is a 10 minute walk to the South.

Inter-University Research Institute Corporation, National Institutes for the Humanities  
**Research Institute for Humanity and Nature**  
 457-4 Motoyama, Kamigamo, Kita-ku, Kyoto 603-8047  
 Tel : +81-75-707-2100 Fax : +81-75-707-2106  
 URL : <http://www.chikyu.ac.jp> **RIHN** Web Search



Inter-University Research Institute Corporation, National Institutes for the Humanities

# Research Institute for Humanity and Nature

2011

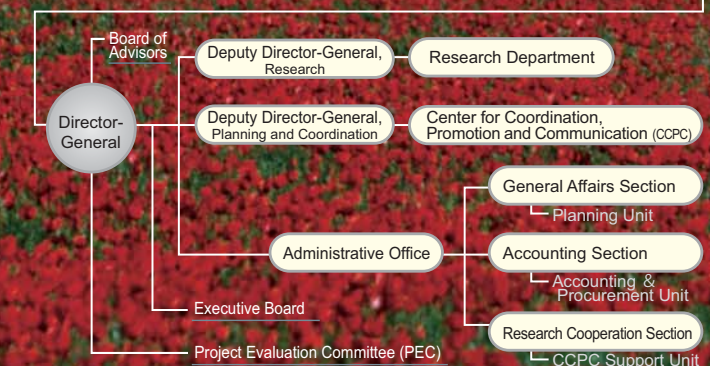


**TACHIMOTO Narifumi**  
 Director-General

At RIHN we believe that the global environmental problems humankind faces today are basically rooted in human cultures. As a consequence, RIHN's mission is to conduct integrative and cooperative research into the interactions between human and biophysical systems, and to suggest how harmonious human-environmental relations can be established or enhanced. We must bring the full range of human intelligence to this task. RIHN Research projects last from three to five years, involve scholars from a wide range of academic disciplines, and are supported by cooperative agreements with universities and institutes at home and abroad. This fixed-term project structure and internationalist orientation allow RIHN to bring an uncommon range of specialists, methodologies and resources to bear on a particular research question, while also advancing the field of global environmental studies. As RIHN enters its second decade, we seek greater integration of our research structures and deeper interaction in the wider world of environmental research. As always, we invite your continued support of, and critical engagement with, RIHN activities.

## Organization

Inter-University Research Institute Corporation,  
 National Institutes for the Humanities  
 (as of April 1, 2011)



# Research Projects

RIHN solicits, hosts and funds integrative, cooperative research projects that advance one of five principal RIHN research domains: Circulation, Diversity, Resources, Ecohistory and Ecosophy.

(as of April 1, 2011)

## C Circulation Program Program Director • NAKANO Takanori



### Effects of Environmental Change on the Interactions between Pathogens and Humans

**C-06** Project Leader • KAWABATA Zen'ichiro

This project examines the direct and indirect human actions that create favorable ecological conditions for infectious disease. Field study examines the intertwined ecological and social causes and effects of Koi Herpes Virus disease,

which has caused episodic mass mortality of common carp raised for human consumption, as a model of pathogen-human interactions.

### Global Warming and the Human-Nature Dimension in Siberia: Social Adaptation to the Changes of the Terrestrial Ecosystem, with an Emphasis on Water Environments

**C-07** Project Leader • HIYAMA Tetsuya

This project uses multiple satellite and surface systems to track changes in the circulation of carbon and water in Siberia, and the effect of their change on ice, snow and permafrost environments. Project researchers assess the interactions of such change and their cumulative significance to human and animal populations in the region.



### Megacities and the Global Environment

**C-08** Project Leader • MURAMATSU Shin

How can megacities—cities of more than ten million inhabitants—become earth-friendly, and how can the present and future welfare of their inhabitants be improved? Focusing on Jakarta, Indonesia, project researchers identify the potential advantages in being a "latecomer" megacity, and the relevance of customary patterns of behavior and urban life to contemporary social and ecological problems.

## Initiative-based Project



### Designing Local Frameworks for Integrated Water Resources Management

**C-09-Int** Project Leader • WATANABE Tsugiohiro

This project conducts interdisciplinary investigation of the merits and demerits of distinct water management regimes, especially related to irrigation, in several semi-arid and humid environmental contexts. Field and modeling

studies are integrated to develop an advanced description of the knowledge systems affecting water management and to enable comprehensive analysis of the key elements in improved basin management.

## D Diversity Program Program Director • KAWABATA Zen'ichiro



### Human Life, Aging and Disease in High-Altitude Environments: Physio-Medical, Ecological and Cultural Adaptation in "Highland Civilizations"

**D-03** Project Leader • OKUMIYA Kiyohito

This project examines the long- and short-term effects of high-altitude environments on human physiology and health. Focusing on several common health problems associated with aging and contemporary lifestyle in the Himalaya-Tibet

region, researchers examine human cultural, physiological and ecological adaptations to high-altitude environments, and how recent changes in lifestyle have affected the health and quality of life of the elderly.

### Collapse and Restoration of Ecosystem Networks with Human Activity

**D-04** Project Leader • YAMAMURA Norio

This project applies new network science to the problem of ecosystem deterioration and collapse, and to the prospects of ecosystem restoration. The project examines social-environmental interactions in two distinct ecosystems that are being dramatically altered by humans, and attempts to identify general properties of productive and destructive ecological change.



## H Ecohistory Program Program Director • TANIGUCHI Makoto



### Environmental Change and the Indus Civilization

**H-03** Project Leader • OSADA Toshiki

This research project examines the social character and environmental context of the ancient Indus civilization. Drawing on archaeology, Indology, and paleo-environmental investigation, researchers reconstruct the social and environmental histories of several Indus cities in order to determine whether environmental factors contributed to the civilization's short life and rapid decline.

### Neolithisation and Modernisation: Landscape History on East Asian Inland Seas

**H-04** Project Leader • UCHIYAMA Junzo

This project examines the long-term landscape history around the East Asian Inland Seas. Comparing "Neolithization" and "Modernization", the two most important historical stages in which humans changed their landscapes on a large scale, project researchers examine the cultural and natural factors that have significantly affected the landscape formation process in the past and may do so in the future.



## R Resources Program Program Director • MOJI Kazuhiko



### Historical Interactions between Multi-Cultural Societies and the Natural Environment in a Semi-Arid Region in Central Eurasia

**R-03** Project Leader • KUBOTA Jumpei

This project utilizes ice-core, lake sediment-core, and tree-ring evidence in combination with archaeological and textual analysis to describe the historical interactions of humanity and nature in semi-arid Central Eurasia. Focusing on the ecological effect of human boundaries and subsistence patterns through time, the study will suggest how such semi-arid regions can best be managed in the future.

### Environmental Change and Infectious Disease in Tropical Asia

**R-04** Project Leader • MOJI Kazuhiko

How is the health of a human community affected by its environment? Beyond the conventional medical description, individual and population health can be described in part as an ecological phenomenon. This project develops the concept of "ecohealth" to describe this wider context and facilitate appropriate health policy in Southeast Asia.



### A Study of Human Subsistence Ecosystems in Arab Societies: To Combat Livelihood Degradation for the Post-oil Era

**R-05** Project Leader • NAWATA Hiroshi

This project examines the life support mechanisms and self-sufficient modes of production of Arab peoples who have survived in arid environments for more than a millennium. It examines key environmental problems such as desertification and invasive species, and identifies the "keystones" to successful human-ecological interaction on which social life in the post-oil era will depend.



### Managing Environmental Risks to Food and Health Security in Asian Watersheds

**R-06** Project Leader • KADA Ryohei

This project combines the social, medical and physical sciences in order to develop strategies of ecological risk management for sustainable food production, health security and watershed planning in the Laguna Lake region, the Philippines. Organized by researchers from Japan and the Philippines, this project critically examines resource degradation and pollution, its origin and effect on aquatic life, food production, food quality, and public health.



## E Ecosophy Program Program Director • YUMOTO Takakazu



### Vulnerability and Resilience of Social-Ecological Systems

**E-04** Project Leader • UMETSU Chieko

This project uses the concept of social-ecological resilience in order to evaluate the attempts of agricultural peoples in Sub-Saharan Africa to adapt to environmental and socio-economic change. Project researchers investigate how households and communities recover from specific social and environmental perturbations, the factors influencing their capacity to adapt, and the role of institutions in strengthening the overall resilience of social-ecological systems.

## The Center for Coordination, Promotion and Communication (CCPC)

The Center for Coordination, Promotion and Communication is responsible for cross-project, cross-domain investigation, research and support that concerns the entire institute.

The Division of Coordination guides the institute's research trajectory. It evaluates the domestic and international trends in environmental studies and facilitates collaborative interaction with other institutes.

The Division of Promotion maintains the laboratory facilities and information systems necessary for research, and guides the adoption and implementation of new research technology and infrastructure.

The Division of Communication promotes inter-project collaboration on key research topics and the publication and dissemination of institute findings to both academic and public audiences.

The Core Research Hub coordinates RIHN's new set of Futurability Initiatives, which are intended to enhance design-oriented, problem-solving approaches to contemporary environmental problems.

## Facilities

The RIHN campus is centered around one large curved building 150 meters in overall length that contains project research rooms and basement laboratories. Research rooms are designed with an open plan in order to facilitate interaction between researchers and interconnection between projects. The main building also houses administrative offices, a library and computing center, a lecture hall and several seminar and other meeting rooms. At the base of the campus, the RIHN House offers accommodation for visiting guests and resident fellows.



Research rooms



Laboratory technicians

hazardous materials, fieldwork and sample preparation, and cold storage.

RIHN maintains eighteen laboratories, including specialized facilities for DNA and stable isotope analysis, mass spectrometry, and several rooms for chemical and biochemical analysis, microscopy, incubation,