

RIHN 2025-2026

Prospectus





Research Institute for Humanity and Nature

Prospectus 2025-2026

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A portrait of Yamagiwa Juichi, an older man with grey hair and a goatee, wearing a light grey suit, white shirt, and a yellow tie with a small pattern. He is standing outdoors with green foliage in the background.

Message from the Director-General

YAMAGIWA Juichi

Director-General
Research Institute for Humanity and Nature

The Research Institute for Humanity and Nature (RIHN), established in April 2001, conducts comprehensive research in global environmental studies. RIHN's research is based on the idea that human culture—beliefs, values and actions—are at the root of contemporary global environmental problems. As a member of the National Institutes for the Humanities, RIHN research investigates the causes and possible solutions of contemporary environmental problems from a wide range of humanities and social sciences perspectives, while also creatively drawing on data defined by the natural sciences.

Today, it's well known that the Earth is facing many challenges. Rapid increases in population, urbanization, large-scale industrial production and the movement of people and goods have led to significant changes in the global environment. Carbon dioxide emissions, global warming, ocean acidification and tropical rainforest deforestation continue to increase despite years of effort to contain them, while phenomena such as the coronavirus pandemic, for example, draw our attention to the complex intersections of climate change and public health.

Important ongoing efforts, such as the United Nations Framework Convention on Climate Change (UNFCCC) and the 2030 Agenda for Sustainable Development Goals show some signs of promise at the international level. Meanwhile Russia's invasion of Ukraine, and the recent military clashes between Hamas and Israel, have increased tensions in the international political order. Governments now face novel challenges as societies around the world appear newly vulnerable to flows of digital information. Information flows may connect people more efficiently and lead to cultural homogenization and loss of ties to local culture and nature. The digital world also can lead to societal fragmentation, and the rise of populism, and mutual suspicion. Fifty years ago the Club of Rome offered concrete proposals to reverse poverty and inequality, empower marginalized groups and transform food and energy—but many of these proposals remain unfulfilled.

At RIHN we believe that addressing such global problems requires not only proper use of science and technology, but also deeper inquiries into the way societies operate, in past and future, and in particular their relationships to and beliefs about nature. Over the past twenty-four years, RIHN has conducted forty-five research projects, many of which were designed to offer specific solution-oriented proposals to their study problems. Such results help us to promote transdisciplinary research, which addresses complex multi-scale environmental problems from the local to the global level, and to create a future-oriented society. Transdisciplinary research involves researchers, governments, municipalities, NGOs, the private sector and other interested parties in solution-oriented projects. It also engages the different kinds of knowledge necessary to culturally-relevant solutions. While we live in knowledge-intensive societies, much wisdom and traditional practices lie dormant in local communities. It's often said that global sustainability requires total transformation, but we should not overlook such deep wells of human experience.

Since its foundation, RIHN research has sought creative interweaving of the natural sciences with the humanities and social sciences. Our approach has established RIHN as a novel international center for environmental studies. RIHN has made important contributions to the global network Future Earth and the Earth Hall of Fame KYOTO, the Globally Important Agricultural Heritage Systems Programme of the U.N. Food and Agriculture Organization, and many other international endeavors. Nationally, RIHN cooperates with Kyoto Prefecture and the city of Kyoto and universities in Japan to serve as the Kyoto Climate Change Adaptation Center and the secretariat of the University Coalition for Carbon Neutrality, collaborations involving many universities, local governments, and industrial companies throughout Japan. With support of the Uehiro Foundation on Ethics and Education, in 2024 RIHN launched the Uehiro Research Center for Japan Environmental Studies, which seeks to revitalize communities and foster human resources by uncovering the sensibilities embedded in Japan's traditional and indigenous knowledge. RIHN is also part of Graduate University for Advanced Studies (SOKENDAI), which offers a doctoral course in Global Environmental Studies and accepts postgraduate students. Furthermore, beginning in 2025, RIHN will establish the Green Knowledge Center to provide comprehensive education and training for addressing environmental issues more broadly across society. Our research networks continue to grow.

As Director-General, I am determined to deepen our practical and conceptual exploration of the future potential of local places, while also remaining sensitive of the need to extend our concept of the global commons. In this way, we will further demonstrate to the world the significance of the Research Institute for Humanity and Nature. We invite you to join us.



Philosophy and Goals

Vision and Mission

The Research Institute for Humanity and Nature (RIHN) promotes research activities aimed at contributing to solving global environmental problems based on the following vision and mission.

Vision

To strive for the realization of an equitable, fair and sustainable society globally by formulating how the relationship of people and nature to be, from the community to global scale.

Mission

To lead the way in the comprehensive study of the environment that aims for a practice directed towards solving global environmental problems and a fundamental and inclusive understanding of the mutual interaction of humans and nature, based on interdisciplinary research that fuses humanities, social science and natural science and as well as transdisciplinary research that cooperates and collaborates with society.

RIHN recognizes that global environmental problems are a challenge common to all humankind, and conducts research based on the foundations of various academic fields. In this context, we approach issues from a slightly different perspective from that of conventional research. The accumulation of research in individual academic fields may be insufficient by itself to approach the essence of global environmental problems. We believe that what is needed is not a partial understanding, but a holistic understanding of the relationships formed by the interaction of humans and nature. To realize this, we are promoting “integrated global environmental studies” as the pursuit of comprehensive knowledge incorporating interdisciplinary research that combines the humanities, social sciences, and natural sciences in combination with a transdisciplinary approach that aims to solve problems in cooperation with society.

According to Dr. HIDAKA Toshitaka who is the first director of RIHN, “Global environmental problems are a matter of human *culture* in the broadest sense of the word.” This means that it is a matter of culture whether we revere nature, desecrate it, feel it to be part of us, or consider it a resource to be used. Furthermore, we need to learn not only from the various cultures on the planet today, but also from the cultures of the past. An important issue in this context is what kind of culture based on the view of nature (view of Earth), that is, what kind of relationship between humans and nature, we should build in the future on a global scale based on the recognition that culture is rooted in the nature of each local region.



In response to this challenge, we have adopted the concept of “futurability,” which extends beyond the commonly used concept of sustainability. This is because it is more important to search for possibilities that will enable future generations to live better (futurability) than to find ways for us to sustain our current lives (sustainability). While understanding and considering the current problems, we must think of ways to leave the planet to the generations of our grandchildren, great-grandchildren, and more in a state that is more livable than it is today.

In 2001, the year RIHN was established, the UNESCO General Conference in Paris signed the Universal Declaration on Cultural Diversity. Article 1 of this declaration states: “As a source of exchange, innovation, and creativity, cultural diversity is as necessary for humankind as biodiversity is for nature.” In Article 2, it states: “It is essential to ensure harmonious interaction among people and groups with plural, varied, and dynamic cultural identities as well as their willingness to live together.” Today, as the information and communication revolution progresses and urban dwellers account for about half the world’s total population, cultural diversity and its values are rapidly disappearing. Furthermore, we have now reportedly entered the “Anthropocene” era, a new geological age in which the effects of human activities have become apparent in every corner of the planet. The depletion of limited resources, deterioration of the biosphere, and pollution of the atmosphere and hydrosphere are progressing on a global scale, and problems are piling up. To solve these problems, the amelioration of which are included in the SDGs of the United Nations, as issues common to all humankind, it is necessary to create new values through various dialogues and exchanges while taking advantage of diverse values. Futurability expresses our desire to further establish “integrated global environmental studies” that consider what the future of people and Earth should be.

To achieve integrated global environmental studies, RIHN conducts interdisciplinary research traversing the academic foundations of the humanities, social sciences, and natural sciences, as well as problem-solving transdisciplinary research in collaboration and cooperation with society. We believe research should contribute to solving real-world problems, and we promote a collaborative approach in which researchers and people in society work together to uncover problems and find new frameworks and solutions.

The National Institutes for the Humanities (NIHU) was established in 2004 as a corporation to support and further develop inter-university research institutes* that promote research in the humanities.

* Inter-University Research Institutes

As Japanese Centers of Excellence (COE) in their respective research fields, these institutes provide universities and other research institutes in Japan and overseas with large facilities and equipment as well as vast materials and information that are difficult for any individual university to maintain, thereby facilitating effective joint research.

NIHU's six institutes

- National Museum of Japanese History (REKIHAKU)
- National Institute of Japanese Literature (NIJL)
- National Institute for Japanese Language and Linguistics (NINJAL)
- International Research Center for Japanese Studies (NICHIBUNKEN)
- Research Institute for Humanity and Nature (RIHN)
- National Museum of Ethnology (MINPAKU)

As international centers of excellence in their respective research fields, these institutes promote fundamental and interdisciplinary research in collaboration with domestic and international universities and other research institutes and researchers.

In addition, these institutes offer courses at the Graduate University for Advanced Studies (SOKENDAI). The six graduate (doctoral) courses are designed to take advantage of the institutes' resources and provide an array of specialized training for researchers.

The NIHU Headquarters houses the Center for Innovative Research (CIR), which conducts research and projects that link multiple institutes and universities, and promotes joint research using a research infrastructure built on digital technology.



NIHU's Mission

As the only inter-university research institute corporation for the humanities, NIHU's mission is to comprehensively explore humanity and its cultures, and through this exploration, to ask what true abundance is, to promote harmony between nature and humanity, and to contribute to the survival and coexistence of humankind.

NIHU's Vision

To realize its mission, in the NIHU's Fourth Mid-term Plan Period (FY2022-2027), NIHU aims to explore various social issues related to the diversity of human culture and social dynamics, try to solve them, and present new values and humanities knowledge that will serve as guidelines for the formation of a future society in which people and nature live in harmony and where science, technology, and humanity coexist. To achieve this, the Center for Innovative Research was established within the NIHU headquarters with the aim of forming new knowledge open to society. Based on the philosophy of open humanities research through co-creation with various people in Japan and overseas, the center will build a research platform using digital technology, promote joint research through that platform, and work on the formation of a "Knowledge Forum" as a place for exchange and collaboration with various people in society and the formation of an international network.

Center for Innovative Research (CIR)

CIR promotes “NIHU Research Projects” and “NIHU Co-creation Initiatives.”

NIHU Research Projects

As basic and interdisciplinary research on the humanities, which forms the core of NIHU, eleven research projects in three types will be implemented, leading to an expansion of academic networks and the creation of new fields to strengthen functions for fulfilling our mission as an inter-university research institute.

Institute-based Projects NIHU's six institutes have established priority research themes in accordance with their respective missions.	Construction of Japanese Historical Knowledge and Open Science Research
	Model Building in the Humanities through Data-Driven Problem Solving
	Empirical and Applied Research on the Japanese Language Based on Open Language Resources
	New Departures and Consortium for Global Japanese Studies: Pioneering and Cultivating Global Japanese Studies
	Renewing Modern Civilization through Nature-culture Complex toward Solving Global Environmental Problems
	Sustainable Development Humanities Research Based on the Info-Forum Archives of Human Culture
Multidisciplinary Collaborative Projects These are projects in which NIHU's institutes take on a central role while collaborating with other NIHU's institutes as well as universities and other external institutes, working with research themes that cut across different fields.	Interdisciplinary and Integrated Studies on Local Cultures: Aiming for the Emergence of Novel Communities
	Object-based Research of Nature-human Interactions up to the Anthropocene
	Expansion Studies of Synthetic Bibliology
Network-based Projects These are projects in which NIHU's institutes play a central role in forming a network with universities and other research institutes in Japan and overseas as well as implementing issues that are important to Japan and the world.	NIHU Global Area Studies
	Inter-University Research Institute Network Project to Preserve and Succeed Historical and Cultural Resources

NIHU Co-creation Initiatives

These are projects that promote the sharing of research results and co-creation with local communities and societies, promote Co-creation research projects and Co-creation outreach, whose aim is to develop research in three ways: “social co-creation,” “digitalization,” and “international co-creation.”

Co-creation Research Projects

These projects promote joint research through co-creation with various organizations and people within and without NIHU as well as develop research in three ways.

- Establishing Science for Universal Communication (S_COM) [social co-creation]
- Building Digital Library for Humanities [digitalization]
- Japan-related Documents and Artifacts Held Overseas: [international co-creation]
 - Early Diplomatic Japanese Collections Abroad: Contextualizing 19th Century Japanese Material Heritage in World History through On-site and Online Research and Use
 - Study on the Construction of Archival Infrastructure for the History of Modern Japan-Vatican Relations
 - Japan-related documents and artifacts in Hawai'i: historical and social survey interface

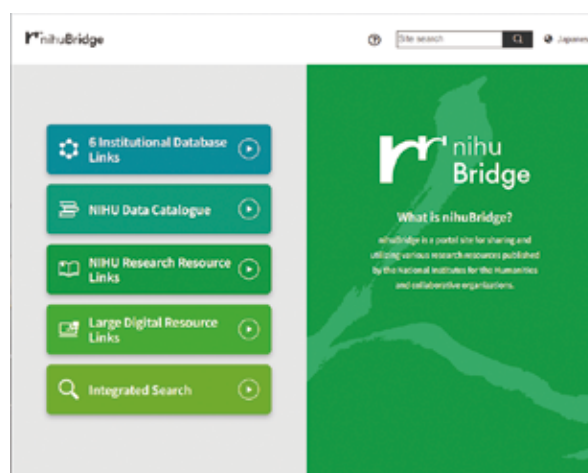
Co-creation Outreach

These initiatives implement projects to accelerate the three types of research development as well as aim to enhance and innovate research at NIHU's institutes and universities and other external institutes.

- NIHU Knowledge Co-creation Projects [social co-creation]
- NIHU “Digital Humanities” (DH) Projects [digitalization]
- NIHU Global Partnership [international co-creation]

nihuBridge

This is a portal site for sharing and utilizing diverse research resources disseminated by the NIHU and associated institutes.



Research Activities at RIHN

RIHN, as an inter-university research institute aims to lead integrated research in the field of global environmental studies by providing a research infrastructure that universities alone cannot offer. This endeavor focuses on achieving a fundamental and comprehensive understanding of the interaction between humans and nature and addressing environmental issues.

At RIHN, research projects are conducted through a “program-project system,” which involves soliciting research topics from a wide community of researchers through international collaboration. Additionally, the “Environmental Isotope Study Collaborative Research Program” provides an environment for domestic and international researchers to effectively engage in advanced collaborative research by utilizing experimental facilities and equipment.

Furthermore, special collaborative research projects called “Designated Research” are conducted in response to the societal demands for the formation of integrated research in the field of global environmental studies and the resolution of global environmental issues.

Program-Project System

The Research Institute for Humanity and Nature (RIHN) is developing integrated research that transcends existing academic fields and disciplines through the “Program-Project System,” in which several research projects are bundled together in a program. Programs consist of “Research Programs” and “Strategic Program,” with several research projects under each program. The research projects are conducted in accordance with the priority issues set for each program.

In the fourth mid-term goals and plans for RIHN, which started in fiscal 2022 and span six years, the institute aims to reveal the dynamics of the interrelationships among various elements in the global environmental issues and the temporal historical development process leading to the “Anthropocene.” It sets programs that will contribute to a more futable society and implements them. The institute aims to achieve flexible, versatile and effective outcomes and disseminate them to society.

Research Program

Research Programs are implemented based on the mission of each of the programs, which was developed in accordance with RIHN’s mission and the activity policy that contributes to the realization of the promotion goals during Phase 4 and includes the following three perspectives. Each Program Director sets a mission statement and announces an open call for projects aiming to achieve such mission.

1. The perspective to explore the understanding of environmental changes and the responses to degradation from the stand point of the Earth system.

This perspective explores the understanding of environmental changes, as well as responses to degradation, from an Earth-systems perspective, in addition to an investigation of the interrelationships and linkages between social/economic systems and natural/ecological systems within Earth systems. Further, it aims to elucidate how the anthropogenic degradation of the natural environment and ecosystems occurs in Earth systems, which comprise intertwined elements and processes, and to explain how this degradation affects human society. Various points are elucidated, such as how Earth systems cascade to tipping points with potentially irreversible consequences, and how far-reaching interactions relate to changes in socioeconomic and ecological systems across the world. An investigation is conducted into the responses that can prevent the further degradation of global environments and restore already degraded global environments.

2. The perspective to explore “way of life” in the Anthropocene by grasping environmental problems from their connection with culture and value systems.

This perspective explores the “ways of life” in the Anthropocene through understanding environmental issues in terms of their connections to culture and value systems. In the current “Anthropocene,” as global environmental problems are rapidly increasing in size and scope, we promote interdisciplinary research involving the humanities, social sciences, and natural sciences to help solve these urgent issues. We ask how we can create spaces within the limits of the earth and society where humanity can operate justly and safely, and what are the ways people can best live in the Anthropocene. Through these studies, the relationships between humans and nature are explored in an explicit and normative manner, as well as the significance and importance of culture and value systems.

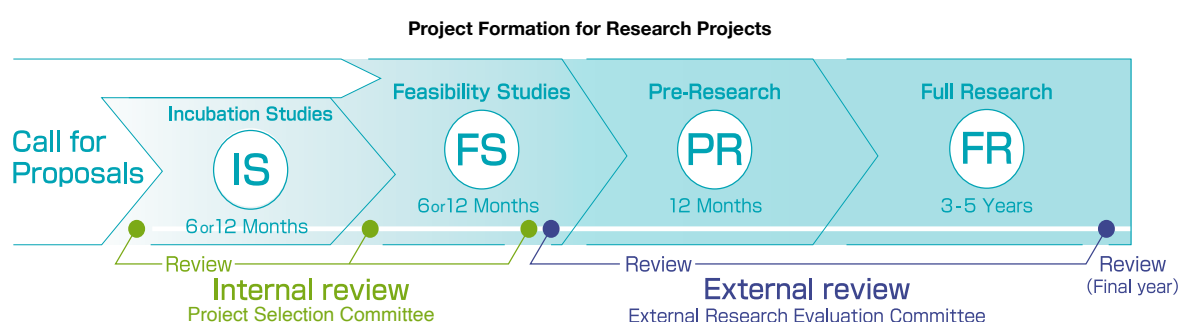
3. The perspective to develop approaches and ideas for solving global environmental problems and suggest mechanisms to realize the solutions in collaboration with various actors in society.

This perspective presents mechanisms for developing ideas and measures to solve global environmental problems, in collaboration with diverse actors in society, in addition to the means to realize such solutions. To transition and transform socio-economic systems into sustainable systems, it will be important to reorganize the roles of key institutions and parties on a large scale. Here, we ascertain how various actors in society (researchers, citizens, non-profit organizations (NPOs), governments, international organizations, etc.) can act to bring about partial renewal and a fundamental change in the system, without being bound by stereotypes and vested interests. We will explore methods of transition/transformation to a sustainable society through case analyses of historical and contemporary transition/transformation processes, social experiments based on practical research, and in other practical and scholarly ways.

Research Phases of Projects Promoting the Integration of Humanities and Natural Science, and Transdisciplinary Research

Promoting interdisciplinary research through exchanges across a wide range of fields is essential for understanding and addressing global environmental issues. However, it is not always easy for scientific disciplines with different problem-solving approaches and research methods to set common issues and collaborate on them. Additionally, in order to address cutting-edge challenges, there is a need to establish a structure that clearly define objectives and goals, and conduct appropriate pre- and post-evaluations. Therefore, in the Research Projects at RIHN, researchers from different disciplines exchange ideas and collaborate with society. They progressively deepen and refine their research through internal reviews and external evaluations, taking on difficult challenges.

Research Projects consist of three stages: Incubation Studies (IS), Feasibility Studies (FS) and Full Research (FR). There is also a preparatory phase called Pre-Research (PR) before Full Research (FR). Research proposals that can immediately contribute to Research Programs may skip the IS stage and begin with the FS stage.



IS is a collaborative research stage with the purpose of discovering new research seeds in integrated research aimed at solving global environmental issues. After passing the internal review at RIHN, the project can advance to the FS stage. FS is a preliminary collaborative research to verify the feasibility of the Full Research (FR). During the IS and FS stages, Principal Investigators gather researchers from domestic and international sources and form research teams necessary to advance their research.

Once the proposal is accepted as PR/FR, the project leader becomes a full-time faculty member of RIHN and can publicly recruit and employ project researchers. The number of collaborative researchers in a single project may exceed 150 in some cases, and to date, over 4,000 researchers have been involved in RIHN's projects.

Through these multi-stage processes, outcomes are generated through interdisciplinary collaboration and integration, and the research resources such as methodologies and information obtained during this process are passed on to subsequent projects.

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Global Environmental Culture Program

Towards a Global Environmental Culture by Articulating Science with Indigenous Knowledge

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Global Environmental Culture Program

Towards a Global Environmental Culture by
Articulating Science with Indigenous
Knowledge

Program Director
MATSUDA Motoji



Program outline

How should we deal with global environmental problems and what steps should we take to solve them? This program combines research that approaches this question from the perspective of changes in culture and values. We need to recognize what types of problems are emerging as global environmental issues. To achieve this goal, we need to analyze enormous amounts of complex data through collaborations in various fields of natural and social sciences to visualize actual crises. Through these studies, we can gain awareness of environmental crises and share our perceptions of them. Using science to visualize, become aware of and share information on crises, we can prepare to solve global environmental problems.

However, this is not the ultimate goal of this program. We need to identify how we as a society can change our behaviors and values in response to this shared perception of global

environmental crises.

We are exploring how the perspective of culture can be incorporated into the concept of global environmental issues to build a sustainable society. The cultural perspective should not be discussed in terms of global or national levels, but as something more familiar and relatable. This implies prioritizing the cohesiveness of the people who actually live together and emphasizing values of better living. The cultural perspective also includes values that differ from scientific knowledge. Rather than correcting, praising, or approving these values, we need to develop a convivial atmosphere (wherein different things are connected using each other's characteristics) and creative perspective that is mutually transformative. This program integrates research projects that create such perspectives.



Nairobi River in Kenya becoming a dumping ground.



Community forest in Northern Thailand reforested by local communities.

Research progress update

This program commenced in April 2022. It comprises various research projects ranging from embryonic stages to full-fledged studies, all contributing to the overarching goals of the program. To integrate diverse projects with different research themes and organizational structures, the program regularly conducts workshops and research meetings where participants share a common question and juxtapose their respective answers. Additionally, there are plans to organize symposiums to synthesize these discussions.

The central question driving this program is: “What does it mean to approach the transformations of human behavior and values in response to environmental crises, both global and local, from a cultural perspective?” Specifically, in the context of environmental crises at both global and local levels, there often exists a disconnect between scientific prescriptions for addressing these crises and the ways in which local communities live and cope with them. In many cases, scientific prescriptions

are perceived as the sole “solution” imposed on the local context, or there might be a convergence of scientific and indigenous/local knowledge to form a solution. Conversely, clashes or conflicts may arise between scientific knowledge and local cultures and values. While such interactions between “science” and “culture” are commonplace in environmental problem-solving contexts, thorough examinations of these complex interactions have often been lacking.

Research projects participating in this program are tasked with elucidating these complex interactions from their respective challenges and fields. They aim to report on the process of grappling with these conflicts during the programs workshops and share their findings with a wider audience.

The program includes the Full Research (FR)

Organic Material Circulation Project, SceNE Project and Fashloks Project, each leveraging their unique experiences and accomplishments for the advancement of the program.

Projects in this program

FR

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Program Director

MATSUDA Motoji

Specially Appointed Professor, RIHN

Motoji MATSUDA is Professor of Sociology and Anthropology, Research Institute of Humanity and Nature, Japan. The regional focus of his research include Nairobi and Western Kenya, and his research topics are urbanization, migration and conflict resolution. His major works include *Urbanisation from Below* (Kyoto: Kyoto University Press, 1998), *African Virtues in the Pursuit of Conviviality: Exploring Local Solutions in Light of Global Prescriptions* (co-edited with I. Ohta and Y. Gebre, Bamenda: Langaa RPCIG, 2017), *The Challenge of African Potentials: Conviviality, Informality and Futurity* (co-edited with Y. Ofosu-Kusi, Bamenda: Langaa RPCIG, 2020), and *AFRICAN POTENTIALS: Bricolage, Incompleteness and Liveness* (co-edited with I. Ohta and F. Nyamnjoh, Bamenda: Langaa RPCIG, 2022).



Organic Material Circulation Project

Building up Organic Material Circulation System among Urban and Rural Area: Toward the Integration of Local Perception and Scientific Knowledge

Based on the principle of returning to nature what is obtained from nature, we are creating organic material circulation system that contributes to land restoration and agricultural production improvement. We return urban organic waste to degraded land in sub-Saharan Africa and Asia including Japan. In the Sahel region of Republic of Niger, we have been working with local residents, municipalities, and central government for 20 years to green the degraded land using organic waste. We aim to contribute to the land restoration, the lives of local residents and prevention of ethnic conflicts among farmers and herders.

Project Leader

OYAMA Shuichi



Project overview

The world's population is expected to reach 10 billion by 2050. The number of megacities -- cities with populations of 10 million or more -- is also increasing. Cities collect and consume a lot of food, energy, and other resources from their surroundings and around the world, but the wasted nutrients are not actively returned to farmland or the natural environment.

Under natural conditions, it can take as long as 10 to 1,000 years to form 1 cm of soil. In addition to economic disparity, food shortages and hunger, there is a serious problem of food loss in many parts of the world. There are fears that the production of food will not be able to keep up with demand due to the overuse of land and soil erosion caused by agriculture

and pastoralism, which have led to land degradation. The food needs to be clean, and the organic waste and manure we throw away are abhorred as dirty. In Japan, the majority of organic waste is disposed of by incineration, with the ashes going to landfills instead of being used. The nutrients do not circulate in the ecosystem.

To achieve sustainability of our urban-based civilization in the future, we must accept the human characteristic of producing dirtiness from cleanliness. We need to understand the importance of the rebirth of life through such dirtiness, and to situate human existence in the earth system. This project hopes to promote a shift in thinking and values that seeks to build a material cycle between urban and rural areas.



Photo 1 "Cleaning the Cities, Greening the Land": On-site greening experiment (Republic of Niger, February 2012)



Photo 2 Pastureland created after 11 years of urban waste application (same location as Photo 1, August 2022)

What we know so far

This research project aims to establish “RIHN compost (waterless dry compost)” technology for food waste disposal that utilizes natural process of fermentation, simple materials, and animal dung. Monitoring the temperature and moisture content of the materials determines the timing of the garbage input and allows for rapid garbage processing. This natural process involves the gut bacteria of thermostatic animals, and the basic temperature of compost material is between 35 and 37 degrees Celsius during the summer. The idea is to process food waste from hotel, using chicken and cattle dung from home improvement stores and nine species of animal dung from the Kyoto City Zoo, including Asian elephants, giraffes, hippopotamuses, zebras, tigers, chimpanzees, gorillas, and sloths. The project is also trying to establish fermentation techniques and recipes to promote the use of food waste discarded by hotel.



Photo 3 Cake made with strawberries cultivated using RIHN compost

Noteworthy items

The first was to use “RIHN compost (waterless dry compost)” technology to make compost from kitchen waste from hotel and animal dung from the Kyoto City Zoo. We clarified the mechanism and established techniques and recipes by controlling temperature and moisture. The second point is networking with companies, the Kyoto City Zoo, the Kyoto Prefectural Board of Education, elementary schools, and farmers. Third, we introduced the concept, technology and recipe for “RIHN compost (waterless dry compost)” to elementary schools in Kyoto Prefecture, and provided classes so as to give opportunities to consider this possible countermeasure to the environmental problem.

The lifestyles and the content of waste in Japan, five African countries are different. By studying the lifestyles, consumption and waste composition in each society, we will promote appropriate use of organic waste, improvement of farmland productivity, land restoration, and nature regeneration through the establishment of an urban-rural organic circulation system.



Photo 4 Elementary school class of composting and food education (Joint project with the Kyoto prefectural Board of Education)

Project Leader

OYAMA Shuichi

Professor, RIHN / Professor, Kyoto University

OYAMA Shuichi is a Professor at RIHN and the Center for African Area Studies, Kyoto University. His specialty is geography, land restoration, peace building research and African area studies. He has conducted multi-disciplinary research based on geography in Zambia, Uganda, Niger and Djibouti. Also, he is tackling building up organic material circulation systems between urban and rural areas in sub-Saharan Africa and Asia including Japan. His main publications include “Reverse thinking and ‘African Potentials’ to combat desertification in the West African Sahel” (African Study Monographs supplementary 57, 2018), and “Waste Valorisation and African Potentials” (in Ohta, I., Nyamunjoh, F. B., and Matsuda, M. (eds.) African Potentials: Bricolage, Incompleteness and Liveness, 2022).

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KOSAKA Yasuyuki

HARADA Hidenori

Chuo University

Tokyo University of Agriculture

University of Tokyo

Tokyo Metropolitan University

Kyoto University of Education

Kyoto University

Kyoto University

SceNE Project

High-resolution Reconstruction of Resilient Indigenous Lifestyle in Environmental Changes to Future Collective Knowledge Deduced from the Fusion of Science and Arts

How can we make global environmental issues our own? By using high-resolution environmental reconstruction using coral annual bands, this project will discover local indigenous knowledge born from the relationship between humans and nature, and local issues buried in global-scale changes. Using art as a medium, we will discuss how local communities can work toward spontaneous solutions to global environmental problems, and create future collective knowledge to obtain an image of local communities that can easily be empathized with.

Project Leader

WATANABE Tsuyoshi



Project overview

Climate change has profoundly affected terrestrial and marine ecosystems, human migration, settlements, lifestyles, and civilizations. Recent economic development, population growth, and globalization risk societal vulnerability, perhaps leading to simpler lifestyles. This project aims to re-evaluate indigenous knowledge from nature and human memories and create a future collective knowledge that is resilient and sympathetic to future global environmental changes.

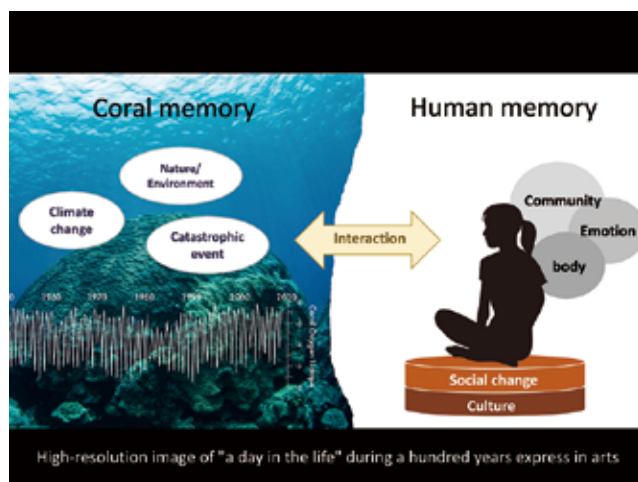


Figure 1 An example of the high-resolution images that we aim to achieve in this research, by transforming coral and human memories into art.

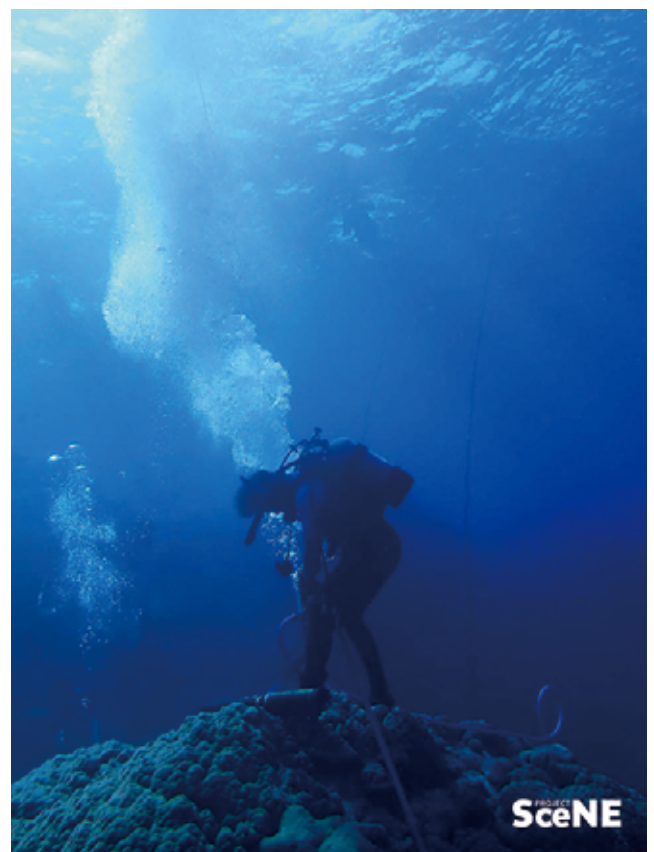


Photo 1 Underwater drilling of reef coral cores. Geochemical analysis of columnar samples can reconstruct hundreds of years of past marine environments on a weekly to monthly resolution.

What we know so far

In this research, we incorporate artistic methods, including theater, to develop and implement methods aimed at promoting empathy acquisition and collaborative future-thinking among interdisciplinary researchers, local stakeholders, and different generations. In previous studies, we have set virtual SceNEs (Scenes of the Era) in the model region of Kikaijima, where pivotal points of environmental and social change in the past were depicted on theater stages. This allowed for the sharing of high-resolution images of the relationship between people and the environment under different historical periods and environmental conditions. Furthermore, to integrate science and art, researchers and artists are engaging in discussions on how to express scientific concepts through art in a collaborative and equitable manner.



Photo 2 Performances of plays produced in this project at Kikaijima.

Noteworthy items

During the PR period, we conducted a process of deriving the necessary conditions for integrating science and art. Researchers and artists conducted retreats together, sharing living spaces and engaging in numerous sessions where scientists shared scientific concepts that artists (directors) translated into physical expressions. This process brought researchers and artists closer to a point where the boundary between them became blurred.

Furthermore, instead of researchers and artists leading the transformation of the community in the project, we implemented the creation of a new festival as a mechanism for equal information exchange and dialogue between researchers, artists, and local residents, mediated by art.

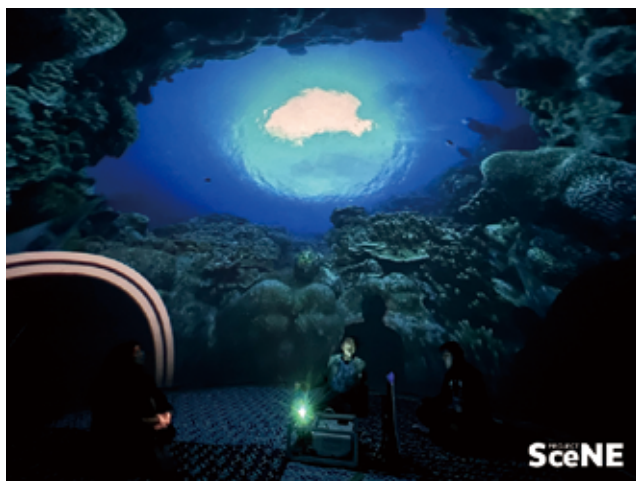


Photo 3 SceNERUIM –Dome for experience of “Umwelt”–

Project Leader

WATANABE Tsuyoshi

Associate Professor, RIHN / Senior Lecturer, Hokkaido University

WATANABE Tsuyoshi started in coral research in Hokkaido University with BS in 1994, MS in 1996, and PhD in environmental earth science in 1999 and continued to study on the coral reefs and earth environmental sciences in Australia, France, Germany, and US. He established KIKAI institute for coral reef sciences since 2014 and is organizing a lot of field excursions inside and outside of Japan, with his friends and students.

Sub Leader

YAMAZAKI Atsuko

Nagoya University

Main Members

GOTO Akira
KATO Hirofumi
HIRATA Oriza
YAMANO Hiroya
NAKAMURA Takashi
TANAKA Kentaro
NISHIMURA Yuya
ITO Takeshi
YODA Mami
KATO Katsumi
FUJIEDA Mamoru
HASEGAWA Yuko
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TANAKA Moena
MIYAJI Kohei

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Hokkaido University
Professional College of Arts and Tourism
The University of Tokyo
Tokyo Institute of Technology
Tokyo City University
Osaka University
Osaka University
Sagami Women's University
JTB Corporation
Kyushu University
Kyoto University
Artist
Artist
Artist
RIHN
RIHN
RIHN
RIHN

Fashloks Project

Fair and Sustainable Hunting Management through Dialogues between Local Knowledge and Science

In tropical rainforests around the world, there are growing concerns about the decline of wildlife due to excessive hunting, leading to the implementation of strict conservation policies. However, these policies are also threatening the survival of local hunting cultures. To resolve this wild meat crisis, cooperation between local knowledge and science is essential, based on equal dialogue between local communities and conservation organisations. Through coproduction research, we aim to establish locally led, sustainable hunting management systems.

Project Leader
HONGO Shun



Outline of the project

Why do this research?

Tropical rainforest wildlife, such as duikers, wild boars, monkeys, and crocodiles, support rich biodiversity through processes like the food chain and seed dispersal. At the same time, these animals provide valuable protein and income to the people living in the forests and have contributed to developing unique social norms and worldviews, acting as a source of cultural diversity. And there is a livelihood connecting wildlife and people—hunting.

Through the 20th century, however, hunting pressure in tropical rainforest regions rapidly increased, and significant declines in wildlife populations were reported. This issue gained international attention as the wild meat crisis, leading to top-down conservation measures, such as protected areas and strict hunting restrictions. As a result, even subsistence hunting by local communities has been restricted, causing conflicts between conservation officials and local people.

The wild meat crisis represents a typical example of a global environmental problem driven by the friction between global values (wildlife conservation) and local values (the survival of

hunting culture). At the root of this issue lies a fundamental misunderstanding between scientific ecology and local knowledge. While there are many commonalities in practical applications, there are significant differences in their basic approaches and priorities. Consequently, methods and decisions based solely on one knowledge system are often not seen as fair or sustainable by the other. The true solution to the wild meat crisis requires a deeper mutual understanding between scientific and local knowledge, alongside the development of a locally based wildlife management system that actively incorporates subsistence hunting.

Project aims

The Fashloks project aims to develop fair and sustainable wildlife monitoring methods and hunting management systems across five sites in the three major tropical rainforests. To achieve this, the project adopts a coproduction research approach, where researchers and local communities collaborate as equals in designing, implementing, and evaluating studies.

We will jointly test scientific methods proposed by ecologists and methods based on local knowledge from skilled hunters to



Photo 1 Peters's duiker—one of the key hunted species in the Central African rainforest.



Figure 1 Illustration of a wildlife monitoring method based on subsistence hunting. Illustration by Izumori Yō.

create wildlife monitoring methods. At two main sites in Cameroon and Colombia, we will also establish platforms where all stakeholders can equally participate in decision-making. Furthermore, we will describe and compare the

research processes at the five sites to assess the effectiveness of the coproduction approach in addressing global environmental issues.

Research progress

2023 2024 2025 2026 2027 2028 2029
FS - FS/PR - **FR1** - FR2 - FR3 - FR4 - FR5

| What we know so far

During the Pre-Research phase in 2024, we focused on laying the groundwork for research activities at each site. This involved conducting preliminary surveys on wildlife and local livelihoods, explaining the project to local communities and obtaining their approval, signing MoUs between local research institutions and RIHN, and expanding our team with researchers from Japan and the host countries. The groundwork for coproduction research between researchers and local communities is now in place for the Full-Research phase.

| Noteworthy items

Preliminary research has revealed site-specific differences in the relationships between scientific conservation and local culture, even within tropical rainforest regions. The Cameroon and Gabon sites prioritise scientific conservation over local cultural practices; the Colombia and the Democratic Republic of the Congo sites place greater emphasis on local cultural practices; and the Borneo site faces mutual distrust that weakens the connection between conservation efforts and local culture. By documenting and comparing research activities across these sites, we can assess the effectiveness and challenges of the coproduction approach under different conditions.



Photo 2 Camera trap set up together with a Baka hunter at the Cameroon site.



Photo 3 Meeting with the Indigenous association (ATICOYA) at the Colombia site. We explained the project's objectives and heard local people's opinions and requests.

Project Leader

HONGO Shun

Associate Professor, RIHN / Junior Associate Professor, Kyoto University

Shun was born in Nagoya, Japan, and earned his PhD in science from the Graduate School of Science, Kyoto University in 2016. After working at the Primate Research Institute at Kyoto University, the Center for African Area Studies at Kyoto University and the Japan International Cooperation Agency (JICA), he has been in his current position since 2024. With long-term field studies as the core research style, he combines scientific methods, including camera trapping, with the local knowledge of skilled hunters to develop wildlife management models for tropical rainforest areas.

Researchers at RIHN

HASHIZUME Akane

Researcher

HANZAWA Maho

Researcher

SEKINO Ayako

Researcher

HIROSHIMA Yukiko

Research Associate

Sub Leader

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NAKASHIMA Yoshihiro

Nihon University



Combining Knowledge for a Fundamental Innovation of Land Use Program

Combining Knowledge for a Fundamental Innovation of Land Use to Combat Global Environmental Challenges

Program Director

SHOBAYASHI Mikitaro



Program outline

Land use generates a variety of socioeconomic benefits, and as a foundation for socioeconomic activities, it plays a major role globally in addressing population growth and reducing poverty. However, both socioeconomic activities on land and changes in land use create core global environmental challenges, such as greenhouse-gas emissions and the depletion of ecosystem services. Drastic improvements in land use and management practices, such as sustainable intensification, are required in certain geographic areas. For example, changing the sites or methods of land use in rural or urban areas can enhance ecosystem services, flood control capacity, and soil carbon sequestration, while stimulating the deployment of renewable energy. These science-based innovations are urgent, as the remaining time is limited.

Challenges must be confronted to substantially improve land use. One is to resolve the conflict between regional collective actions and the actions of individual actors, including private

sectors in the current socioeconomic system. Another challenge is the need to develop strategies and organizations that address issues arising from the varied relationships between socioeconomic activities and natural capital in diversified contexts and geographical areas. Furthermore, there are additional perspectives to coordinate in new strategies. As examples, land use forms the basis of local culture, and rural and urban areas further complement and interlink with each other as well.

This program aims to propose initiatives for improving the use of land and its associated water resources, as well as the institutional frameworks and policies for scaling them up. Additionally, it should contribute to the establishment of international standards for institutional frameworks and policies. The program will do so by facilitating an international policy ecosystem for the exchange and generation of innovative ideas.

Research progress update

This program began in April 2023. Under the program, multiple projects operate autonomously, each utilizing its own ideas and methodologies, while collectively aiming to achieve the program's objectives. In FY2025, in addition to the project in its final (fourth) year of full research — “*Fair for Whom? Politics, Power and Precarity in Transformations of Tropical Forest-agriculture Frontiers*” — a new project titled “*Satoyama Reconnections: Engaging Communities in Resilient, Nature- and Climate-positive Land Use Futures*” has advanced from the pre-research phase to the full research phase. Furthermore, a new pre-research project, “*Pluriversal Land Use: Exploring Institutions, Values and Worldviews*” is scheduled to begin.

To advance the projects under this program, it is crucial to create an environment where projects stimulate each other while enhancing complementarity. Each research project shares a focus on land use as its mission and a strong awareness of the impact on actual policies and institutions, as well as adopting interdisciplinary and transdisciplinary methodologies. However,

there are differences in the scope of land targeted, the nature of environmental issues addressed, and the approach to impacting policies and institutions. To maximize the individuality of projects while enabling the achievement of the program's overall objectives, efforts will be made to enhance complementarity based on activities such as setting up forums for exchanging opinions on project content and progress and organizing seminars and workshops on common themes.

Relatedly, the program aims to become a “policy ecosystem,” where policymakers, relevant actors, and researchers converge, generating innovative ideas for land use innovation. Research on the conditions conducive to policy and institutional innovation is progressing, and building on these findings, the program itself seeks to serve as a venue for a sort of social experiment, contributing to policy and institutional innovation.

Projects in this program

FR

FairFrontiers Project	WONG, Grace	P22
SATOCONN Project	DWYER, Janet	P24

PR

Pluriverse Project	TAMURA Norie	P26
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Photo by Yuzuru Wakabayashi

Program Director

SHOBAYASHI Mikitaro

Specially Appointed Professor, RIHN

SHOBAYASHI Mikitaro graduated from the Graduate School of Agricultural Sciences, of the University of Tokyo, and the Master's Course from Johns Hopkins University, Department of Geography and Environmental Engineering. He holds a doctorate in agriculture from the University of Tokyo. Since 1982, he has worked in policy planning related to agricultural policy, agricultural environment and water resource policy, trade and environment, etc. at the Ministry of Agriculture, Forestry and Fisheries, the World Bank,

the OECD (Organization for Economic Co-operation and Development), and the Shiga Prefectural Government. In 2007, he became a professor at Gakushuin Women's College, in the Faculty of Intercultural Studies. Between 2017 and 2023, he was a vice president of the same college. He has been in his current position since April 2023. His major publications include "Agri-environmental Policy in Japan" and "The Concept and Policy Design of Agricultural Direct Payments."



FairFrontiers Project

Fair for Whom? Politics, Power and Precarity in Transformations of Tropical Forest-agriculture Frontiers

Deforestation and land use intensification in the tropical frontiers of Central Africa and Southeast Asia are rapidly transforming landscapes, livelihoods, and local well-being. This is both a global environmental problem and a local social-ecological crisis. This project carries out critical policy analyses and case study research to identify the conditions for how development and transformation of forest-agriculture frontiers can enable more equitable and sustainable development.

Project Leader
WONG, Grace



Outline of the project

Forest-agriculture frontiers of diverse swidden and smallholder practices are rapidly being converted to homogenous landscapes of commodity plantations and mines across the tropical Global South. These frontiers of agriculture, fallow and forest mosaics provide multiple ecosystem services, support social, cultural and livelihood needs, and are areas where indigenous communities and local people have traditional rights to land and resources. Land use intensification is often pursued as ‘sustainable development’ and progress, but has not led to expected win-win social and ecological outcomes. Indigenous groups and smallholders in these landscapes have simultaneously engaged with, adapted to, and resisted against different development, and yet regularly find themselves and their customary rights marginalized at the expense of interests of local elites, State and external investors, reflecting the complexities of underlying politics, institutions and power structures around forests and land-use. FairFrontiers applies inter- and transdisciplinary approaches to ask: Whose interests drive the transformations of forest-agriculture frontiers, who benefits and who is made precarious? What are possible policy options that can deliver ecologically sustainable and socially equitable outcomes?

To address these research questions, the project carries out five interlinked strands of research in Southeast Asia (Malaysia (Sabah, Sarawak), Laos and Indonesia) and Central Africa (Cameroon, Democratic Republic of the Congo). The first

research module delves into the historical (and colonial) constructs of policies for forest and land governance, and their contemporary pathways, and carry out critical discursive analyses of how policies frame and problematize development in forest-agriculture frontiers. The second and third modules examine how ecosystem services and well-being bundles are changing in frontiers, using a set of mixed social and ecological field methods and participatory approaches. The fourth module applies transdisciplinary approaches in the co-production of knowledge and inclusion of diverse local narratives and values. The fifth module carries out integrative and comparative analyses across modules, scales and countries through structured qualitative and quantitative analyses. Together, they provide insights into issues of equity, justice and transformation. All research is carried out collaboratively with country partners and involve researchers, civil society activists, conservation practitioners, villagers and students.

The case study regions have unique ecological, social, institutional and political contexts, enabling our novel research approaches to collectively contribute towards advancement of theory and identification of equitable and sustainable development pathways for the millions of people who still depend on these diverse landscapes for their livelihoods and well-being.

Progress

Under Module 1, we analyzed the case of REDD+ and argue that the construction and interpretation of data and information are shaped by the social and political contexts in which they emerge (Brockhaus et al. 2024). It explains in part why new and ever larger amounts of data available for analysis still remains insufficient for changing business-as-usual deforestation. Another paper carried out a discursive analysis of British business print media’s representations of ‘the local’ in Cameroon’s land, forest and plantation sectors from 1850 to 2010 (Goldsmith et al., in review). The authors argue that although narratives have changed, existing mechanisms are still

sticky in re-producing inequalities between ‘the local’ and finance and business interests.

Our findings under Modules 2 and 3 provide insights into the complexity of social-ecological relations in the changing frontiers. W. P. Maung et al. (2025) show that foreign agricultural investments promoted by the state have driven extensive changes in farming practices in Northern Laos. While this may help some farmers to earn more, many others struggle with loss of access to land and forests. Sidibe et al. (in review) find that local people living near Upemba National Park in DR Congo are heavily reliant on natural resources and have a strong

2019	2020	2021	2022	2023	2024	2025
IS/FS	FS/PR	PR	FR1	FR2	FR3	FR4

place attachment to their agricultural land, but their wellbeing are also impacted by a history of displacement and war. Both papers call for more inclusive governance and nuanced planning processes to support more equitable development.

The project uses photovoice as a form of knowledge co-production (Module 4). Under the theme of ecosystem change and wellbeing, photovoice participants in Sulawesi used photos and stories to express their frustrations and hopes in a landscape dominated by state interests (Sahide et al., in review). With support from partners at Universitas Hasanuddin, the participants held an exhibition and a fiery dialogue with policy actors to call for recognition of their customary rights (see photo 1).

Noteworthy items

The project held an international seminar under the Land Use Innovation series on “The Political Frontier: Bridging Political Economy and Political Ecology”. Prominent researchers Nancy Lee Peluso and Maria Brockhaus discussed the theoretical approaches, methods and analysis for examining forest and land

use change. Project researchers from Indonesia and Borneo provide grounded and sometimes conflicted understandings of resistance and indigeneity.

Project members contributed to global assessments in two chapters that examine finance as a driving force of social and ecological change in frontiers in the IUFRO Global Assessment on Forest Governance (Brockhaus, Wong & Obeng-Odoom 2024) and the IPBES Nexus Assessment (Wong, Chapter 2 lead author).

The project is publishing a special issue in Forest & Society journal on “Navigating change in forest-agriculture frontiers: Centering equity and justice in land use transformations in the Global South”. Thus far, 6 articles are published (including Wong et al. 2024), and 2 additional articles are in review.

All field research and data collection are now completed, and photovoice activities are ongoing in the Campo region in Cameroon (see photo 2) and Upemba National Park in DR Congo.



Photo 1 Photovoice exhibition in South Sulawesi, Indonesia



Photo 2 Focus Group Discussion in Campo region, Cameroon

Project Leader

WONG, Grace

Associate Professor, RIHN / Researcher, Stockholm University

WONG Grace is a resource economist and has over two decades of research experience on conservation and development, and on forest and climate change governance in the tropical Global South. She has worked extensively throughout Southeast Asia and Sub-Saharan Africa. Her current research examines global-local flows of finance, discourses and commodities, and their impacts on local well-being and ecosystem services, with a particular focus on issues of politics, power, and equity.

Sub Leaders

BROCKHAUS, Maria	University of Helsinki
MERTZ, Ole	University of Copenhagen
MOELIONO, Moira	CIFOR-ICRAF
SAHIDE, Muhammad Alif K.	Universitas Hasanuddin
SAKAI Shoko	Hong Kong Baptist University

Researchers at RIHN

SIDIBE, Alimata	Senior Researcher
METARAGAKUSUMA, Andi Patiware	Researcher
WAI PHYOE MAUNG	Researcher
SUJASWARA, Azwar Azmillah	Research Associate
KAN Ayami	Research Associate

Main Members

AGUIAR, Ana Paula Dutra de	Brazil National Institute for Space Research
ASSEMBE-MVONDO, Samuel	Wildlife Conservation Society
BRUUN, Thilde Bech	University of Copenhagen
CHACGOM, Aristide	Green Development Advocates
EGAY, John Kelvin	Universiti Malaysia Sarawak
HEPP, Maria Catherine	Lethbridge Polytechnic
ISHIKAWA Noboru	Kyoto University
JOHN, Gordon Thomas	PACOS Trust
LAIN, Christine	Forgotten Parks Foundation
NAITO Daisuke	Kyoto University
NKONGOLO MUKAYA, Jules Fortunat	Center for Intercultural and Interdisciplinary Research for Sustainable Development in Southern and Central Africa
NTIRUMENYERWA MIHIGO, Blaise-Pascal	University of Kinshasa
NYEIN, Chan	Kyoto University of Advanced Science
SELOMANE, Odirilwe	University of Pretoria
TENGÖ, Maria	Stockholm University
THONGMANIVONG, Sithong	National University of Laos
VARKKEY, Helena	Universiti Malaya

SATOCINN Project

Satoyama Reconnections: Engaging Communities in Resilient, Nature- and Climate-positive Land Use Futures

In many developed economies, fragmentation of the goals and drivers for land use linked to the pursuit of commodity production and higher financial returns has fractured and weakened former longstanding interdependencies between people and nature, contributing to significant environmental and social damage. Satoyama, as promoted by the IPSI partnership, highlights the importance of recognising and working with longstanding cultures and knowledge of land management and people-nature interdependence in rural communities, in order to repair such damage. This project aims to identify, understand and promote options for enhanced land-use governance, ownership and stewardship. SATOCINN is mobilizing multi-actor partnerships via six living labs in satoyama high nature value landscapes across Europe and Japan. We are testing innovative approaches to reconnect and revitalize people-nature interconnections, learning from the past and prospecting for a nature-and-climate-resilient future.

Project Leader
DWYER, Janet



Outline of the project

The deep interdependence of people and nature is often noted but rarely supported in modern economies and societies. Satoyama high-nature-value landscapes hold a vital repository of assets, knowledge and skills that can help affirm and renew this interdependence, but their future is challenged by lack of appreciation and support from policies, legal institutions, markets and wider societal processes, in Japan and Europe. This project seeks to reconnect people with the values and understanding coming from Satoyama, exploring improved ways to tackle current and future ecological challenges, including biodiversity decline and the climate emergency.

Our four-year research project involves integrated and transdisciplinary analysis and engagement to characterize and revitalize Satoyama landscapes in Europe and Japan. It aims to achieve a deep understanding of their challenges and opportunities for strengthened (re)connection between people and nature, to enable appropriate and resilient responses to global climate and biodiversity crises.

SATOCINN deploys cutting-edge methods within a Living Labs framework, to engage research, practice and policy in planning and undertaking action for positive change. Insight from natural and social science and performance arts will be developed and shared within and between six contrasting case studies. The 'living lab' approach has gained prominence in recent participatory and impact-oriented studies as a mechanism to promote experimentation and real-world change

alongside research and public engagement. A four-stage process: visioning; experimenting; learning lessons and promoting transferable practice; is centred around the animation and facilitation of place-based examples of challenge and change.

In our two Japanese and four European cases (UK, Switzerland, Sweden and Portugal), we will create and mobilize living labs to benefit local communities and inform global, national and regional policies. Indigenous and expert knowledge will combine in new ways to strengthen Satoyama concepts and contemporary practice, to revitalize and sustain cultural landscapes, making a positive contribution to more resilient rural futures. The research team has longstanding experience using embedded, participatory methods in our case study locations, with multi-disciplinary expertise spanning ecology, landscape, agriculture, forestry, economics, sociology, political science, heritage and arts. We will co-develop the project with local stakeholders including farmers and communities, institutional and policy actors, to ensure real impact. In parallel, SATOCINN will train and empower a cohort of young researchers to apply and develop these methods to benefit people and planet.

Our goal is to help society to recognize the value of a continued and strengthened Satoyama ethic, in future land use governance and action.

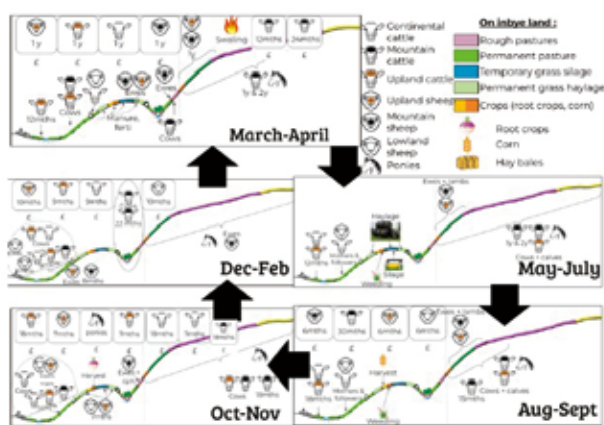


Fig 53. Landscape use for farming in the 2005 in the Dartmoor farming region

Figure 1 A diagram of farming systems evolution in Dartmoor – from the agrarian diagnosis method that SATOCINN is adapting for its SILA. Illustration by DUVERNE, Lucie and PAGES, Paul (2023).



Figure 2 Stakeholder mapping in Moriyama – illustrating the groups and associations in one case study community, and their interlinkages. (Created by FUKAMACHI Katsue and OHARA Ayumi, published in Omi Studies, No. 15, Omi Multicultural Institute, Seian University of Art and Design.)



Photo1 Satoyama in Ohgi (Shiga Pref., Japan) Photo: FUKAMACHI Katsue



Photo2 Satoyama in Pededa-Gêres (North Region, Portugal) Photo: FUKAMACHI Katsue

Research progress

2023 2024 2025 2026 2027 2028
FS - FS/PR - **FR1** - FR2 - FR3 - FR4

What we know so far

In our pre-research year, project members met in the UK for three days of intensive planning. Numerous subsequent online sessions were used to discuss methods and approach. Junior staff were successfully recruited so we will begin our full research with a complete team of experienced and early-career researchers keen to engage with local actors and policymakers, in our six case study sites. A training event for European teams was held in Paris to refine our Satoyama Integrated Landscape Assessment (SILA) method and share skills and experience in facilitating living labs. Training will be repeated in Japan in June 2025. Teams are being deployed to undertake the SILA in each location and guidance is being finalized, building upon the core method of agrarian diagnosis, adapted to respond to multifunctional land uses. We will work effectively in each of our case study areas whilst simultaneously testing, reflecting upon and refining the approach as we progress in partnership with local actors, mobilising indigenous and expert knowledge.

Meetings of the full team are planned for Autumn in Kyoto, and Spring in Porto, to enable continued learning and exchange between cases. We will launch our web-site and establish our external Advisory Board in this coming year, as well as drafting the SATOCONN dissemination, communication and exploitation plan and developing initial theories of change, identifying potential pathways to impact in policy and practice. Already, teams in each location have established good connections with their communities, helping to ensure that our living labs can be inclusive, supported by early stakeholder mapping.

Towards the end of the first year, we will publish the results of our six SILA, as well as reporting on developing and refining this novel method. Briefings will be produced for policy makers, examining the benefits and challenges of integrated multifunctional and systemic landscape assessment.

Noteworthy items

Our initial work to compare the context in each of the six case study areas has demonstrated considerable similarities in respect of current challenges and the systemic nature of changes occurring across their territories. This means that we can already identify a common portfolio of potentially interesting elements to pull together, combining these in different ways that respond to the unique situation of each case, in order to find positive ways forward.

Demographic decline and increasing land-use conflict both link to low levels of understanding of human-nature interlinkages and their value for well-being, among many in society. Nevertheless, in each of our cases we can identify both older and young people who have an appreciation of these fundamental connections. Entrepreneurial actors seem important, as well as individuals and communities who are willing to invest time and effort documenting and maintaining cultural and social customs, practices and knowledge to pass between longstanding and newly-arriving households and families. Already, the relations between researchers, policy makers and practitioners have been sufficiently established to enable early discussion and examination of the motivations and capacities that might underpin our living labs, as they develop.

We have also begun to identify gaps in knowledge and/or the gathering and interrogation of information that could be important for the project. More detailed ecological condition and climate projection data must be brought together to enable effective future planning, as well as stakeholder mapping and policy assessment to help us to establish the potential 'room for manoeuvre' and scope for change, in each case.

In considering arts and performative experience, we have identified a rich range of existing practice and custom associated with Satoyama, in all of our cases. We therefore plan to mobilize endogenous arts methods within the project, as it develops.

Project Leader

DWYER, Janet

Professor, RIHN and University of Gloucestershire

Janet is Professor of Rural Policy at the Countryside and Community Research Institute (CCRI), University of Gloucestershire. With 35 years' experience and an international reputation in applied rural research, her work has focused upon sustainable agriculture and rural development policies, undertaking evaluations for UK and European governments, European Commission and OECD. Janet was UK Agricultural Economics Society President, 2021-22, and Directed the CCRI for 10 years. Current research includes supporting rural resilience in uplands, co-Directing the National Innovation Centre for Rural Enterprise (NICRE) with Newcastle and Warwick Universities, and rural regeneration in cultural landscapes in Asia and Europe. She was awarded an OBE in June 2022 for 'services to rural research'.

Researchers at RIHN

Ei
OSAKI Risa

Senior Researcher
Research Associate

Main Members

FUKAMACHI Katsue
KOBAYASHI Mai
DEVienne, Sophie
SANDSTRÖM, Camilla
HALLER, Tobias
LOMBA, Angela
TOYODA Mitsuyo
BLACK, Jasmine
McCRACKEN, Davy
SHORT, Chris

Kyoto University
Kyoto University
AgroParisTech
Umeå University
University of Bern
University of Porto
Niigata University
Niigata University
Scotland's Rural College
University of Gloucestershire

Pluriverse Project

Pluriversal Land Use: Exploring Institutions, Values and Worldviews

Anthropocentric approaches to nature have contributed to biodiversity crises. This project proposes the concept of 'pluriversal land use' that respects ecosystem boundaries while fulfilling human needs. It aims to explore institutional frameworks, technologies, values, and connections between practices and society that enable the spread of such land use. It also seeks to contribute to global dialogues such as the Convention on Biological Diversity.

Project Leader

TAMURA Norie

Associate Professor, The Graduate School of Project Design

Why This Research?

Our planet is facing a biodiversity crisis, partly due to anthropocentric use of nature focused solely on human benefit. This disrupts natural balance and harms various species. For a sustainable future, a new approach is needed. We focus on the worldview of 'living as part of nature' proposed by IPBES. Based on our prior research on local communities' land use and agriculture/forestry, we know that many people around the world practice this worldview, both in traditional and new forms.

We propose the concept of 'pluriversal land use'—approaches to land use that are not limited to human-centered benefits. This project includes six working groups, each exploring aspects such as: pathways for expanding transformative practices,

certification systems centered on biodiversity, new values and technologies for forestry, citizen participation in landscape conservation, the values of organic farmers, and international networking. Through these working groups, we aim to understand values and worldviews people form through practice, identify keys to connecting practice with society, and examine methods to initiate new practices.

What We Aim to Do

In the FS stage, we conducted multilingual literature reviews focused on the concept of multispecies. We found that 'pluriversal land use' is a dynamic process that defies fixed definition, requiring a fluid conceptual framework. In the FR stage, we aim to clarify this concept through networking with practitioners, mutual learning, and focusing on relational values. Our first step is to hold workshops among researchers to envision ideal models of pluriversal land use within the project.

Additionally, in Japan, we have found that some farming practices involve rediscovering and reintegrating non-target species on farms. These biodiversity-friendly practices are often supported by certification systems and eco-labeling to brand products. However, we observe that these practices expand beyond product value and reflect an evolving worldview. Moreover, certifications help connect individual farmers' efforts with regional economies and societies. Thus, such farming and certification systems serve as intermediaries between practice and society. We also explore their applicability to other regions.

Values Typology	Living from natural resources	Living in natural landscape	Living with natural species and habitats	Living as nature as part of us
World-views	Anthropocentric	Anthropocentric	Bio/ecocentric	Pluricentric
Broad values	Prosperity, livelihood	Belonging, health	Stewardship, responsibility	Openness, harmony with nature

created by author from IPBES(2022)

Figure 1 Typology of values presented in the IPBES Values Assessment Report



Photo 1 Fish cradle rice paddies in Shiga Prefecture

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Faculty of Collaborative Regional
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Research Area

Tokushima, Nagano, Kyoto



Winner of the Special Jury Grand Prize, RIHN's 18th Photo & Movie Contest
UCHIYAMA Christmas

"Mongolian Nomad"

(Mongolia, 2024/8)

This Mongolian farmer is particularly a caretaker of many horses. In this photo, he is getting milk from his horses and I observed that he has a particular way of making a sound to send a signal to the horse to produce milk. It seems he is very close to his horses and he knows their ways. In Mongolia, this farmers have a close connection with their livestock and they are called "nomads" because they have to move to find pasture lands in the wintertime.

Co-creation of the Earth-human System Program

Co-creation of the Sustainable Future based on the Linkage of the Earth-human System

Program Director
TANIGUCHI Makoto



Program outline

Global environmental problems are local, regional and global challenges that have arisen from the intricately intertwining of various phenomena created by humankind as part of the development of civilization with the earth and life history. In order to solve these problems, this program aims to shed light on the connections among people, society and nature, and to integrate research that considers the earth and humans as a linked system.

How can human beings build a sustainable society in the overwhelmed global environment due to the expansion of human activities and the cascade of events that will exceed them? The underlying basic question is how people should behave. This program clarifies the various boundaries and linkages existing in the earth-human system that compose complex global environmental issues. The program focuses on promoting better understanding and communication methods

that make changes in human lifestyles, values, behavior and society. We want to transform the relationship between humans and nature for a sustainable future by co-creating a multi-scale social design that connects all the people.

In our lives, we make seemingly contradictory choices, such as securing homogeneous resources and maintaining a diverse environment, enjoying benefits and mitigating disasters, and choosing between immediate decisions and distant goals. It is necessary to reconsider and re-establish various boundaries among people, society, and nature by moving from the confrontation and separation of nature and human society toward a symbiotic, coexisting society based on norms. This program tries to reduce conflicts/tradeoffs among resources, and among social activity processes, and increase synergy among them through co-creation with stakeholders.

Research progress update

This program commenced in April 2024. Various types of research projects at different stages will collaborate to advance research toward achieving the program's goals. In FY2025, the program consists of six Feasibility Studies (FS), and two Full Research (FR) Projects, which include:

- 1 Adaptive Governance of Multiple Resources based on Land-Sea Linkages of the Water Cycle: Application to Coral Reef Island Systems
- 2 Towards Sustainable Nitrogen Use Connecting Human Society and Nature

Additionally, the program organizes the T³ Earth Forum, which discusses transformations such as perception change, behavior change, and institutional change, which are common challenges of the program. The program will share the challenges and research processes of these forums and individual projects, utilizing their outcomes within the program.

Projects in this program

FR

LINKAGE Project	YASUMOTO Jun	P30
Sustai-N-able (SusN) Project	HAYASHI Kentaro	P32

FS

Rituals and Positive/Negative relational values: The nexus and co-creation of humans, culture, and nature	NAKADAI Ryosuke	P34
Towards an Ethical Economy: Addressing the Impacts of Commodity Trade and Consumption on Indigenous Land and Survival	NGUYEN, Tien Hoang	P35
Water and Nutrient Footprint Analysis from Land to Ocean and Its Adaptation Strategies for Tipping Points: Towards Healthy Coastal Areas in Asia	ZHANG Jing	P36
Disasters and Development in East Asian Regionalism in the Anthropocene	ITO Takeshi	P37
Social-Ecological Accelerations (SEA) as the key to understand the 20th-c. Great Acceleration and its possible futures: learning from case studies in European and Japanese Environmental History	IZDEBSKI, Adam	P38
Examining Attitude and Behavior Change towards Climate Change by Utilizing Citizen Knowledge	BABA Kenshi	P39



Program Director

TANIGUCHI Makoto

Specially Appointed Professor, RIHN

TANIGUCHI Makoto is a hydrologist and a Specially Appointed Professor at the Research Institute for Humanity and Nature (RIHN), Japan. He is an IUGG Elected Fellow, a JpGU Fellow, a Cooperation Member of Science Council of Japan, a Future Earth Assembly member, and a Steering Committee member of Water-Energy-Food Nexus KAN. He served as PI and Co-PI of many research projects including UNESCO-GRAPHIC, Groundwater in Asian Megacities, Water-Energy-Food Nexus, and the Belmont Forum SUGI Food-Energy-Water Nexus. He has worked on water-related projects around the world, authored or co-authored over 180 articles, and edited or co-edited eight books.

RIHN

MIURA Tomoko

ICHIHARA Yuko

Research Associate

Research Associate



LINKAGE Project

Adaptive Governance of Multiple Resources based on Land-Sea Linkages of the Water Cycle: Application to Coral Reef Island Systems

Focusing on coral reef island systems located in the Ryukyu Arc as well as in the tropical and subtropical western Pacific, we are elucidating the connections between land and sea through the water cycle, the biocultural diversity and community capability, and the evolution and structure of organizations and institutions that govern the use and management of multiple resources. By integrating and visualizing the above interconnected components, we aim to shed light on adaptive governance of multiple resources based on the water cycle.

Project Leader
YASUMOTO Jun



Project overview

People living in tropical and subtropical islands where coral reefs develop utilize the blessings of limited water resources such as groundwater and spring water, as well as marine and forest resources. Water circulates between the land and the sea while changing its shape, connecting the coral reef ecosystem and the land, and nurturing the biodiversity and culture unique to the region. However, recent land use and socioeconomic changes have led to the depletion of water resources and deterioration of water quality, as well as changes in precipitation patterns due to climate change, rising seawater temperature and sea levels due to global warming, and ocean acidification. Due to changes in the marine environment, the deterioration of coral reef ecosystems is progressing, making it difficult for people to use natural resources such as water resources, fisheries resources, and forest resources, that is, multiple resources.

Therefore, we are conducting research to strengthen “adaptive governance,” in which social mechanisms and institutions for environmental conservation and natural resource management are adjusted to the situation together with local people, so that people living on coral reef islands can continue to use multiple resources.

To this end, this project first aims to elucidate the realities of

water circulation and multiple resources through various means of analyzing groundwater and coral reef ecosystems. We seek to understand and predict the responses of multiple resources to changes in socio-economic factors and climate change.

Additionally, utilizing a historical ecological approach, the project aims to uncover the cultural values, connections, and diversity of nature nurtured within island communities. By doing so, we will elucidate the mechanisms for sustaining livelihoods in island communities with limited resources.

On the other hand, through behavioral science and institutional analysis, we will clarify the transition and multilayered nature of the system, organization, and awareness of adaptive governance. In addition, we will create new value by visualizing and integrating the relationships between scientific knowledge, indigenous knowledge, policy knowledge, and other knowledge necessary for adaptive governance.

Through these results, we hope to shed light on the connections between land and sea through water cycle as well as on the adaptive governance of multiple resources, in order to contribute to the realization of a resilient nature-symbiotic society in coral reef island systems.

Research progress

What we know so far

In 2024, a severe phenomenon occurred in Japan's largest coral reef, Sekisei Lagoon, where 84 % of coral colonies experienced bleaching. While rising sea temperatures are considered the main cause of bleaching, we also focused on phosphorus in the seabed sediment.

Previous studies have shown that phosphorus in the sediment hinders coral skeleton formation and negatively affects coral growth. In Sekisei Lagoon, a significant correlation was also found between phosphorus levels and coral bleaching or reduced density.

As a result of three years of monitoring, we created a map of sedimentary phosphorus distribution (Figure 1) and, for the first time, clarified the relationship between phosphorus levels and coral coverage or bleaching. By using concentration

2019	2020	2021	2022	2023	2024	2025	2026
IS	FS	FS/PR	FR1	FR2	FR3	FR4	FR5

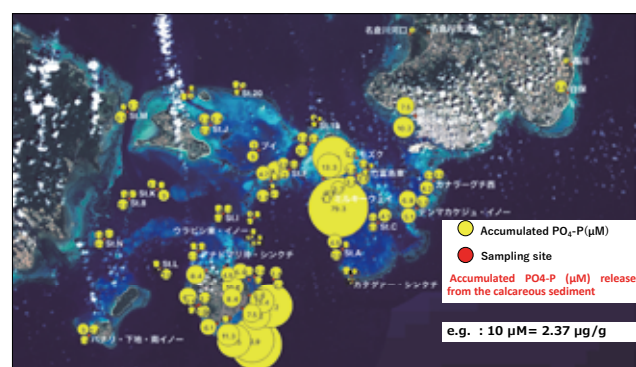


Figure 1 Mapping of accumulated nutrients (phosphate) at seafloor in the Sekisei Lagoon. Circle size corresponds to concentration.



Photo 1 Groundwater survey on Wangi-Wangi Island, Indonesia



Photo 2 Interview survey on Wangi-Wangi Island, Indonesia



Figure 2 Poster for an exhibition of old photographs with the theme of "Preparedness and Transition" on Yoron Island

thresholds (0.3–0.7 $\mu\text{g/g}$) as indicators, we can estimate the permissible load from land-based sources, enabling more effective management.

We also conducted an awareness survey in Japan and Indonesia on how the "invisibility" of groundwater resources affects public interest. As a result, we found that in Japan, there is generally low interest in groundwater, whereas this trend was not observed in Indonesia.

Noteworthy items

In the Wakatobi Islands, Indonesia, full-scale field research is underway, including investigations of groundwater and coral reef sediments, as well as interviews with local residents (Photos 1 and 2).

On Yoron Island, we are continuing the "Yunnu Historical Photo Survey: Reflecting on Nature and Daily Life," which

aims to document the relationship between the island's natural environment and local lifestyles. This collaborative effort involves local residents, the board of education, and researchers, who work together to collect and record materials on environmental and lifestyle changes, develop educational resources, and build a digital archive accessible to all. The theme of the fourth photo exhibition was "Preparedness and Transition" (Figure 2; <https://yunnu-photo.org/>).

Additionally, on Yoron Island, we created a "Projection Mapping Model (P+MM)" to visually convey land use changes based on a 3D water circulation simulation model and aerial photographs (Photo 3). Information sharing with the local community is also progressing, and we are broadly disseminating our findings through the LINKAGE booklet series (Figures 3 and 4).

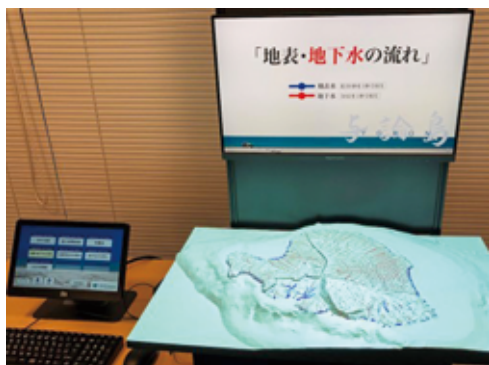


Photo 3 Projection Mapping Model (P+MM) of Yoron Island



Figure 3 LINKAGE Art Book Series Vol. 3 - Fuganutu: The Jeju Island Castaway Folklore of Yonaguni Island



Figure 4 LINKAGE Booklet Series - Reweaving Expression and Knowledge 02: Singing Together with the Land

Project Leader

YASUMOTO Jun

Associate Professor, RIHN / Assistant Professor, University of the Ryukyus

Specializing in agricultural engineering, hydrology, environmental dynamics analysis, and island water environments. After obtaining a Ph.D. in Agriculture from the United Graduate School of Agricultural Sciences, Ehime University, held positions as a research fellow at the Faculty of Engineering, Kyushu University, a project researcher for the Subsurface Environment Project at RIHN, and an assistant professor at the Faculty of Agriculture, University of the Ryukyus, before assuming the current position. Research themes include groundwater salinization, submarine groundwater discharge, coral calcification, accumulated nutrients, land-sea interactions, and watershed governance.

Sub Leader

SHINJO Ryuichi

University of the Ryukyus

Researchers at RIHN

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LEONG, Chris

Researcher
Researcher

Main Members

KUBO Yoshiaki
TAKAHASHI Soyo
RAZAFINDRABE, Bam H.N.

Kwansei Gakuin University
University of the Ryukyus
University of the Ryukyus

*All project members are listed at the link below.



https://www.chikyu.ac.jp/rihn_e/activities/project/detail/8/
<https://mizunowa.skr.u-ryukyu.ac.jp/investigation.html>

Sustai-N-able (SusN) Project

Towards Sustainable Nitrogen Use Connecting Human Society and Nature

Nitrogen provides great benefits to humankind as a fertilizer, industrial material and fuel. However, our use of nitrogen unintentionally causes nitrogen pollution and threatens the health of humans and nature. In this project, we will elucidate the dynamics of nitrogen, of which much remains unknown; quantify the environmental burden and impact of nitrogen use; evaluate its benefits and threats and the effects of countermeasures and behavior change; and design the future to realize sustainable nitrogen use.

Project Leader
HAYASHI Kentaro



Project overview

Nitrogen is an essential element for creating proteins, nucleobases, and other biomolecules. Although nitrogen is ubiquitous, with 78% of the earth's atmosphere being nitrogen gas (N_2), most living organisms, including humans, do not have access to stable N_2 and require a form of nitrogen other than N_2 (reactive nitrogen, Nr). Our diet is also a means of obtaining nitrogen in the form of protein. To get more food from limited land, we need Nr as fertilizer, and ammonia synthesis technology (Haber-Bosch process), developed in the early 20th century, made it possible to obtain as much Nr as desired.

Synthesized Nr has been used as an industrial raw material as well as a fertilizer, providing a great benefit to mankind. On the other hand, much of the Nr used by humans is discharged into the environment along with its reactive properties. This is especially due to the low nitrogen use efficiency (NUE) of the food system. In addition to the low NUE of food production,

there are consumption challenges such as food loss and a preference for livestock products with relatively low NUE. Combustion of fossil fuels and others is another source of Nr emissions.

As a result of Nr emissions into the environment, various forms of nitrogen pollution such as global warming, stratospheric ozone depletion, air pollution, water pollution, eutrophication, and acidification have occurred, causing damage to human and natural health. The trade-off between the benefits of nitrogen use with the threat of nitrogen pollution is called the “nitrogen issue” (Figure 1). To ensure that our future possibilities are sound, we conduct this research to gain integrated knowledge that will lead to solutions to the nitrogen issue and sustainable nitrogen use for future generations.

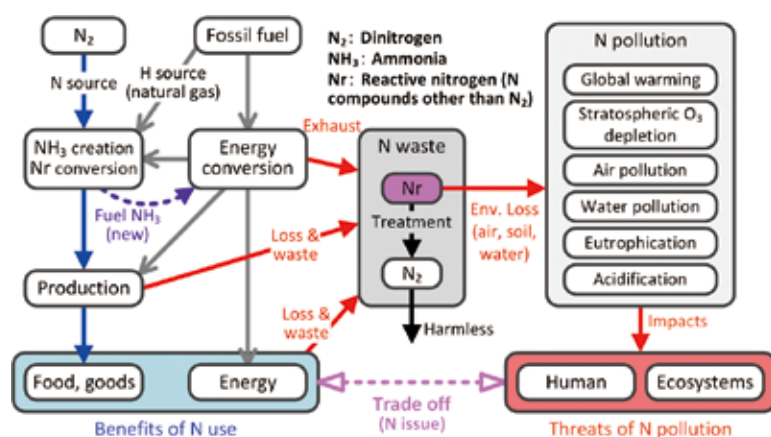


Figure 1 The nitrogen issue is a tradeoff between the benefits of nitrogen use and the dangers of nitrogen pollution.

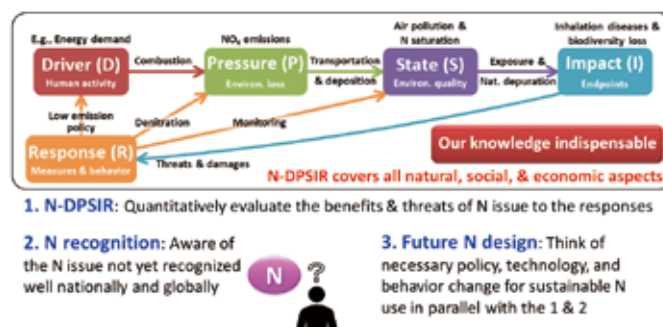


Figure 2 Breakthroughs those SusN project aims.



Research progress

2021	2022	2023	2024	2025	2026	2027
FS	-	PR	-	FR1	-	FR2
				FR3	-	FR4
						FR5

What we know so far

We have been aiming for three breakthroughs to address the nitrogen issue (Figure 2): developing tools to quantitatively analyze the causal links between nitrogen use and pollution; raising awareness of the nitrogen issue; and future design for sustainable nitrogen use. In FY2024 (FR2), we continued publishing analyses and reviews on nitrogen cycles in nature and human society, while engaging in extensive outreach using leaflets (Figure 3) and other materials. These efforts supported domestic and international initiatives for nitrogen management.

Noteworthy items

We contributed to international nitrogen management through roles such as Director of the East Asia Center of the International Nitrogen Initiative (INI) and Steering Committee Member of the Global Partnership on Nutrient Management (GPNM), including participation in the UNEP Working Group on Nitrogen (WGN). Domestically, we supported the formulation of Japan's Action Plan on Sustainable Nitrogen Management, released by the Ministry of the Environment in September 2024. We successfully secured Kyoto as the host city for the 10th International Nitrogen Conference (November 2026). We also explored art-science collaboration through events such as the exhibition "Ghost Stories and Nitrogen," co-created with artists.

Project Leader

HAYASHI Kentaro
Professor, RIHN

HAYASHI Kentaro is a biogeochemist interested in nitrogen cycling in a variety of terrestrial ecosystems from cropland to polar regions as well as holding comprehensive scientific knowledge for sustainable nitrogen use involving food, industry, and energy production and consumption. Trained at Hokkaido University (M.Eng.) and Tokyo University of Agriculture and Technology (Ph.D.), he was a member of the Pacific Consultants Co., Ltd., National Institute of Advanced Science and Technology, and Institute for Agro-Environmental Sciences, NARO, before his current position at RIHN. He received the JSSSPN Award from the Japanese Society of Soil Science and Plant Nutrition in 2021.

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Research Associate

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KURIYAMA Koichi

Kyoto University
Tohoku University
Kyoto University

Rituals and Positive/Negative relational values: The nexus and co-creation of humans, culture, and nature

Local supernatural belief systems and rituals, such as sacred forests around shrines and fish memorial ceremonies held by fishing communities, may contribute to environmental conservation. This project applies approaches from ecology, psychology, mathematical biology, folklore studies, and religious studies to clarify how such beliefs and rituals influence environmental thought and pro-environmental behavior. Based on these findings, we aim to create new resources and values.

FS Principal Investigator

NAKADAI Ryosuke

Lecturer, Faculty of Environment and Information Sciences, Yokohama National University

Why This Research?

In order to protect the natural environment, it is said that we must clarify the “value of nature.” Traditionally, this has meant understanding which aspects of nature are important not merely because they provide resources or benefits to humans, but because nature itself has intrinsic value. However, such abstract thinking may not necessarily lead to concrete actions to protect the environment. Therefore, attention has been drawn to local people’s views and behaviors regarding nature. Our research focuses on supernatural belief systems and rituals, aiming to reassess their roles in maintaining sustainable relationships between humans and nature. For example, forests around shrines are revered as the dwelling places of gods, and fish memorial ceremonies among fishers express gratitude for nature’s blessings. Such beliefs and rituals may promote sustainable use of nature. By clarifying the functions of these localized practices, we aim to create new values and resources that contribute not only to solving environmental problems but also issues like depopulation in rural areas.

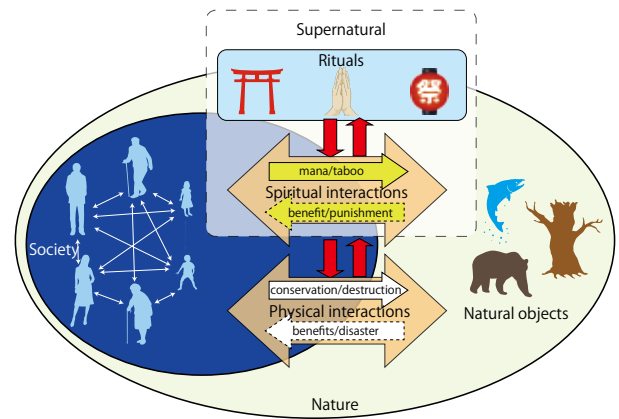


Figure 1 Overall concept of the project

What we want to do

This research seeks to answer the central question: ‘How do supernatural belief systems and rituals influence environmental thought and pro-environmental behavior?’ To explore this, we take a four-pronged approach: theoretical, empirical, fieldwork, and applied. In the theoretical component, we propose models from environmental ethics and mathematical biology. In the empirical component, we create a scale to assess environmental thought from a psychological standpoint and examine its correlation with beliefs and rituals. In the fieldwork component, we conduct surveys and literature reviews in areas such as Lake Biwa and Touge in Yamagata to understand local human-nature relationships. In the applied component, we propose ways to effectively utilize local resources and values, based on our findings, to local governments, society, and especially religious institutions such as shrines and temples.

Main Members

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HASHIMOTO Michinori
KOBAYASHI Keiko

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Doshisha University
Hokkaido Musashi Women's University

JAIST
National Institute for Environmental Studies

Hokkaido University
Kyoto Kacho University
Nagano Environmental Conservation Research Institute

Research Area

The area around Lake Biwa and the Toge area

Towards an Ethical Economy: Addressing the Impacts of Commodity Trade and Consumption on Indigenous Land and Survival

Indigenous communities are essential to global sustainability yet are increasingly threatened by economic activities driven by international trade, particularly expanding agriculture and mining, which cause environmental degradation, displacement from ancestral territories, and erosion of cultural traditions. This research examines the impacts of global commodity production and consumption on Indigenous Peoples. Through collaborative approaches, we aim to develop transformative solutions that mitigate Indigenous-industry conflicts, promote ethical trade practices, and encourage behavior change by aligning economic activities with social norms of justice, equity, and inclusiveness to safeguard Indigenous rights.

FS Principal Investigator

NGUYEN, Tien Hoang

Assistant Professor, Tohoku University Graduate School of Environmental Studies

Why do this research?

Indigenous Peoples manage more than a quarter of Earth's land and have lived closely with nature for thousands of years. They play a vital role in protecting the environment, conserving wildlife, and preserving unique cultural traditions. Indigenous communities hold valuable knowledge in fields such as medicine and agriculture, helping the world tackle big challenges such as climate change.

However, Indigenous Peoples are facing serious problems. Increased demand for natural resources has led to more farming, mining, urban growth, and tourism. These activities often push Indigenous communities away from their ancestral lands, hurting their cultures and ways of life. Since Indigenous Peoples rely heavily on nature, they are significantly vulnerable to environmental changes.

Many of these issues are driven by global trade, meaning that



Photo 1 Satellite image showing evidence of illegal mining operations in the Yanomami Indigenous Territory, Brazil (Image source: Google Earth, 2025)



Photo 2 Collect information through community mapping in a Katu people's village in Central Vietnam

problems faced by Indigenous communities are caused not solely by domestic demand within their own country but also by products consumed internationally. Understanding how our buying habits affect Indigenous communities worldwide can help us create better policies, promote responsible behavior, and protect the rights and cultures of Indigenous Peoples for future generations.

What we want to do

The project pioneers in three significant ways: firstly, it aims to identify and map “hotspots” where international trade significantly affects Indigenous populations by introducing new frameworks for impact assessment, tentatively named the “Indigenous-industry conflict footprint”. Secondly, the research will explore strategies to mitigate these effects and balance global trade with the preservation of Indigenous rights. Using an integrated approach that combines scenario-based modeling, in-depth qualitative analysis, and targeted field surveys, researchers will evaluate policy effectiveness across diverse socio-economic contexts. Finally, the project seeks to raise awareness about the impact of trade on Indigenous survival and encourage inclusive stakeholder engagement in co-creating transformative solutions to minimize conflicts.

Main Members

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OISHI Takanori

GARNETT, Stephen

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Tokyo University of Foreign
Studies

Charles Darwin University

Research Area

Worldwide

Water and Nutrient Footprint Analysis from Land to Ocean and Its Adaptation Strategies for Tipping Points: Towards Healthy Coastal Areas in Asia

Coastal waters in Asian countries face various environmental issues—such as eutrophication, oligotrophication, and hypoxia—depending on the stage of economic development. This project focuses on the transport of water and nutrients from land to sea, identifying historical turning points and understanding environmental impacts. By integrating future projections and socio-economic benefit analysis, we propose sustainable management strategies adapted to each region's characteristics.

FS Principal Investigator

ZHANG Jing

Vice President for International Affairs and Professor, Faculty of Science, University of Toyama

Why do this research?

Rapid economic growth and population concentration in many Asian coastal regions have created environmental challenges such as eutrophication, oligotrophication, hypoxia, and declining fish catches. Japan experienced similar problems during its rapid-growth era but recovered through strict environmental regulations. Recently, however, some coastal waters have become “too clean,” which may now contribute to reduced fishery productivity. These long-term changes indicate the presence of key turning points shaped by interactions between society and climate.

This project investigates these environmental transitions to help realize “healthy coastal waters.” By examining global drivers like climate change together with region-specific factors such as land use and social conditions, we develop adaptation strategies tailored to local contexts.

Focusing on nutrients transported from land to sea, we analyze regional water and nutrient footprints, assess current conditions, and project future changes under multiple climate scenarios. Based on these findings, the project proposes practical strategies for the sustainable use of water and nutrients that support resilient coastal ecosystems and communities.

What we want to do

This project is organized into three stages:

- (1) identifying issues and gathering evidence,
- (2) analyzing mechanisms and developing long- and short-term projections, and
- (3) promoting social implementation and building societal consensus.

We begin by visualizing the water and nutrient footprints that link land and sea. In the target coastal areas, we assess current environmental conditions, identify the origins and key

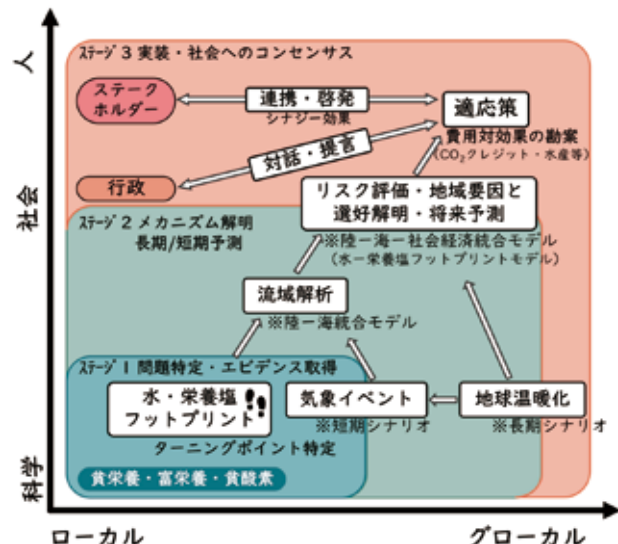


Figure 1 Overview of the project

elements of emerging problems, and classify them into patterns. By integrating water and nutrient monitoring data with regional socioeconomic data, we quantitatively evaluate social costs and benefits. Based on insights gained through collaboration with diverse stakeholders, we also examine measures to enhance ecosystem services and explore improvements to existing policies and the development of new ones, aiming to design comprehensive adaptation strategies.

In Japan, we analyze long-term monitoring records to understand past turning points in coastal environments. In Southeast Asia, we introduce Japan's past best practices—such as overcoming pollution—and begin capacity-building tailored to local needs. Led by the Japanese research team, we work with partners across government, industry, and academia to improve recognition and understanding of the issues and to identify pathways toward practical implementation.

Through these efforts, the project aims to contribute to the realization of “healthy coastal waters” in both Japan and Southeast Asia.

Main Members

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ENDO Takahiro	Osaka Metropolitan University
YANG, Jie	Shinshu University
CHAKRABORTY, Shamik	University of Toyama
YAMAGUCHI Atsuko	Nagasaki University
INAMURA Osamu	INAZ-Lab, Former Director of Uozu Aquarium
MATSUNO Takeshi	Professor Emeritus, Kyushu University

Research Area

Toyama Prefecture, Saijo City in Ehime Prefecture, Bohai Sea and Yangtze River estuary (China), Gulf of Thailand

Disasters and Development in East Asian Regionalism in the Anthropocene

Managing disasters, such as floods or industrial accidents, is central to achieving sustainable development in East Asia. Across the region, the character and risks of disasters have changed due to industrialization and its legacies, trade, investment, aid, and geopolitics. This research will rethink how we understand, prepare for and respond to disasters through examining the interconnections created by East Asian regionalism and people's changing relationship with nature. We focus on cases in Cambodia, China, Japan, Myanmar, Taiwan, Thailand, and the regional economic, environmental and disaster governance systems that impact them.

FS Principal Investigator

ITO Takeshi

Professor, Sophia University

Why do this research?

Our study examines the relationship between disasters and development in East Asian regionalism in the age of the Anthropocene. The impacts of disasters ranging from floods and droughts to earthquakes and tsunamis, incur significant economic, social and environmental harms, and put at risk systems of human provisioning, such as for food, energy supply, and transport. This is even more true in a rapidly changing and interconnected world where our everyday life is greatly dependent on things that have been made available through flows of trade, investment, and aid in global supply chains.

This research explores how deepening economic and environmental connectivities in East Asian regionalism relate to causing, preparing for and responding to disasters of various types. Previous studies and policies have largely treated economic, environmental, and disaster governance separately, failing to clarify the interconnected relationship between disasters and development. This reflects the siloed approach to governance, which is often also focused onto human interests without considering people's changing relationship with the natural world that sustains societies and also needs to be nurtured.

We ask: "What policy/governance is required to ensure sustainable development and disaster management in the context of regional connectivity?" Conceptually, we draw on World Ecology, the social production of disasters, and environmental justice. By reconceptualizing the co-produced character of economic development, disasters and environment, we aim to rethink how governance systems can be holistically designed and put into practice in a post-Sendai Framework, post-2030 development agenda context.

The research will consider a range of types of disasters, including floods, droughts, earthquakes and industrial accidents. Local case studies will be undertaken in Cambodia, China, Japan, Myanmar, Taiwan, and Thailand. Regional case studies will also be undertaken, for example on transboundary haze, transboundary water governance, climate change and weather systems, and the role of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre). In doing so, the research aims to be transdisciplinary and contribute to the process of policy design



Photo 1 Tonle Sap Lake, Cambodia sustains the food security and livelihoods of millions of people. Recent changes in seasonal flooding have impacted livelihoods and are caused by several factors, including upstream hydropower dam operation and climate change.

and institution building by collaborating with relevant actors at the local, national, and regional levels.

What we want to do

During our feasibility study research period, we have three goals. First, we will consolidate our research design conceptually and methodologically, drawing on research in world ecology, the social construction of disasters, and reciprocity and values in attaining justice in humanity-in-nature relations. Second, we will organize a workshop at RIHN in July 2025 attended by researchers involved in the project to share details on proposed case studies and to explore their interconnections. Based on this event, we will prepare a co-authored publication. Third, we will consolidate the research projects coordination internally and with external collaborators ready to propose a full research design through a transdisciplinary approach. This includes identifying opportunities to engage in policy dialogues such as the post-2030 global development agenda, post-2030 Sendai Framework, and the ASEAN 2045 Vision, and to develop strategies for the research to have concrete benefits to communities impacted by disasters in each country where case studies are located.

Sub Leader

MIDDLETON, Carl

Chulalongkorn University

Main Members

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Kobe University

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Mae Fah Luang University

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National University of Singapore

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JOBIN, Paul

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NAW THIRI, May Aye

University of Tokyo

JUWITASARI, Reni

Mae Fah Luang University

MATSUDA Yoko

Kyoto University

NAITO Daisuke

Kyoto University

OTSUKA Kenji

Institute of Developing Economies

SURIMAS, Thianchai

Thammasat University

VADDHANAPHUTI, Chaya

Chiang Mai University

WANG, Raymond Yu

Southern University of Science and Technology

YONG, Ming Li

Singapore University of Social Sciences

Advisory Committee

CRUZ, Ana Maria

Kyoto University

NAGAMI Kozo

Tohoku University

PORIO, Emma

Ateneo De Manila University

SUGIHARA Kaoru

Research Institute for Humanity and Nature

Research Area

Regional governance in East Asia and the Association of South East Asian Nations (ASEAN). Situated case studies in Cambodia, China, Japan, Myanmar, Taiwan, and Thailand

Social-Ecological Accelerations (SEA) as the key to understand the 20th-c. Great Acceleration and its possible futures: learning from case studies in European and Japanese Environmental History

Since the 1950s, rapid global development has pushed us toward environmental collapse. Our project looks at historical-ecological changes in Eurasia to understand phases of accelerated development (“social-ecological accelerations”) and predict how the current global “Great Acceleration” might unfold. While much research has focused on Europe, we need examples from Eastern Asia, particularly Japan, for a complete understanding of this phenomenon. Our team has met twice in 2024, and in 2025, we plan to create a detailed research plan, including concrete methodologies to apply and areas in Japan to study.

FS Principal Investigator

IZDEBSKI, Adam

Independent Research Group Leader, Max Planck Institute of Geoanthropology, Jena, Germany

Why do this research?

Our planet has been changing with unprecedented speed since the middle of the 20th c. The pace of change has been much greater than even during the most intensive decades of the Industrial Revolution. Due to the powerful new technologies, and the knowledge of physics and chemistry, the process of the so-called global “Great Acceleration” destabilized in parallel several life-sustaining systems on the planet Earth. We are still in the midst of this process, and it has become critically important to understand its roots and its future course, and to achieve means of steering it in the desired, safe direction.

The Great Acceleration is such a massive challenge, that all scientific disciplines should be mobilized to address it. In our project, we integrate the methodological of humanities and natural sciences that study the past in order to understand the ecological and social dynamics behind the Great Acceleration, and provide evidence-based future scenarios, including possible stabilizing or mitigating interventions. The Great Acceleration of the 20th-21st c. is not the first phase of rapid development in human history. In fact, the long human history and prehistory is punctuated by short intervals of accelerated growth in population numbers and economy, of the emergence of new, transformative political institutions and cultural phenomena. These societal developments always have an ecological dimension and most often lead to profound transformation of the natural environment – similar to the one we are experiencing now on the planetary scale.

Our project team will focus on a few selected locations in Japan and possibly in other parts of East Asia to look closely at past phases of accelerated social-ecological change. We have serious grounds to expect that such phases occurred several times in Japanese history. There is substantial research in Japanese demographic and economic history that suggests centuries-long periods of stability, punctuated by phases of

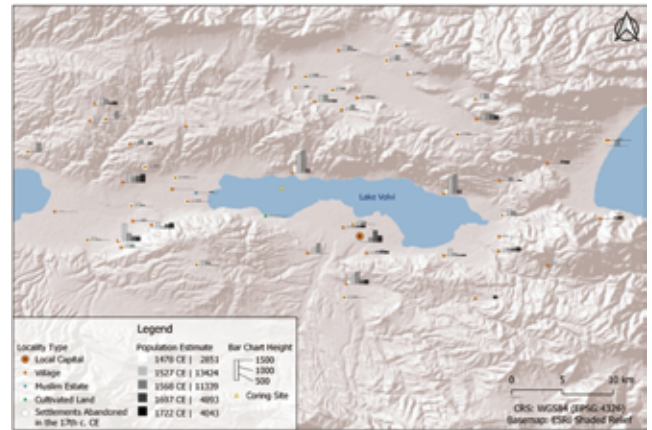


Figure 1 Dramatic population changes around Lake Volvi in Greece, Europe (figure from Masci et al., *Journal of Quaternary Science*, DOI: 10.1002/jqs.3645)

rapid demographic growth: first, in the 6th-7th c. CE (Nara/Heian), this type of dynamics occurred in the Kansai region, with the establishment of the imperial bureaucracy and the associated agrarian intensification; second, in the 14th/15th c. CE (Muromachi), when there is ample evidence for agricultural and demographic boom, both related to the rise in commerce and the political integration of Japan; third, in the age of political unification of the early Tokugawa shogunate (17th c. CE), there occurred a demographic explosion similar to the one in early modern Europe a century earlier and a full economic integration of the archipelago. Fourth, of course, there was the period of accelerated economic and demographic growth in Japan starting with the Meiji revolution and continuing into the 20th c. CE. Our approach in studying these phases of accelerated development will combine humanities-based methodologies such as the study of archaeological remains and historical documents, developed into digital databases, with detailed analysis of the sediments from selected lakes across Japan, focusing on DNA and pollen analysis.

What we want to do

So far, our group met for two workshops in 2024 and refined the initial concept of a comparative project in Japanese-European environmental history. We formulated the detailed concept of the project, its research questions, and we articulated clearly its policy relevance. We also settled on specific methodologies, which we will now develop in detail, planning our future natural and social science research. We will do it in particular at our third European-Japanese workshop planned for May 2025.

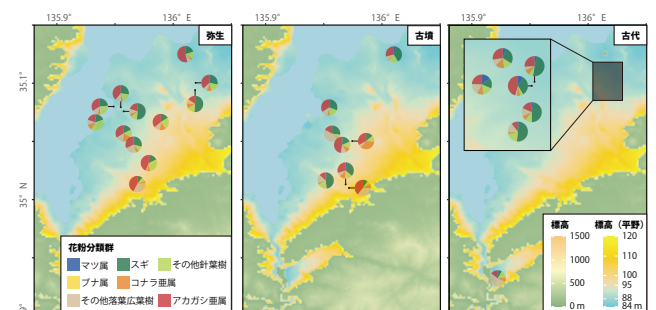


Figure 2 Pollen assemblages from archaeological sites in Shiga Prefecture during the Yayoi, Kofun, and Ancient (Asuka, Nara) Periods

Main Members

NAKATSUKA Takeshi
HAYASHI Ryoma
GUZOWSKI, Piotr

Nagoya University
Lake Biwa Museum
University of Białystok

Research Area

Environmental history, Environmental Science

Examining Attitude and Behavior Change towards Climate Change by Utilizing Citizen Knowledge

This project integrates citizen-collected knowledge and traditional knowledge with scientific data to foster narrative-based understanding of climate change. Through deliberation and public engagement, it promotes attitude and behavior change toward a decarbonized, climate-adaptive society and contributes to policy and legacy development.

FS Principal Investigator

BABA Kenshi

Professor, Faculty of Environmental Studies, Tokyo City University

Why do this research?

This study promotes citizen science as a means to bridge scientific knowledge of climate change with broader public understanding and the behavioral change needed for societal transformation. By encouraging citizens to observe and document climate-related phenomena in their everyday lives—such as shifts in local weather patterns, seasonal cues, or changes in ecosystems—and by incorporating traditional knowledge that reflects long-term human–environment relationships, the project brings diverse forms of knowledge into dialogue with scientific predictions. Building on these complementary perspectives, the project enhances an existing deliberation platform that enables citizen scientists, experts, and policymakers to jointly examine the collected data, exchange interpretations, and co-create narratives that connect the past, present, and future. Through this integrated and participatory process, the study seeks to deepen societal understanding of climate change, strengthen evidence-informed decision-making, and promote actions that support the transition toward a decarbonized and climate-resilient society.

Societal Changes Surrounding the Lake Biwa Drought: Conducting the Lake Biwa Drought Workshop



Assisting in the understanding of drought mechanisms by integrating field data through WEB-GIS and utilizing knowledge graphs on C²S-PaaS (Climate Change Citizen Science PaaS) Platform

Photo 1 “Exploring the collection of local and traditional knowledge on the domestic site and pilot-testing the platform in a workshop (Shiga Prefecture)”

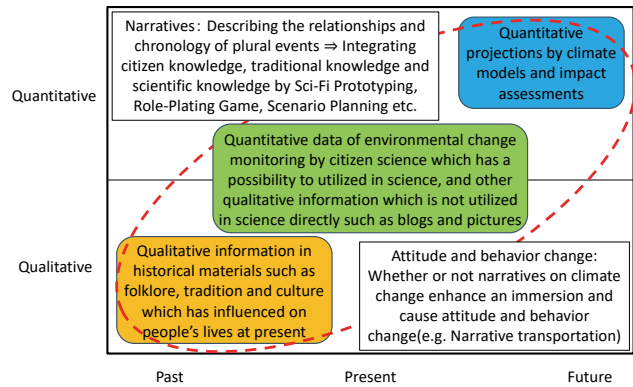


Figure 1 Integration of citizen, traditional, and expert knowledge as narratives and potential for behavior change

What we want to do

First, we will work with experts to identify fields, indicators, and monitoring methods in which citizen scientists can effectively observe phenomena that may reflect the impacts of climate change. At the same time, we will explore the potential for collecting citizen knowledge and traditional knowledge at domestic sites and promote their sharing through the platform. We will also examine directions for expanding the platform and investigate how climate-related narratives generate immersion and encourage behavioral change. In addition, we will establish a framework for international collaborative research with partners involved in climate-focused citizen science overseas.

Main Members

AOKI Eri	Yokohama City University
AOKI Kazumasu	University of Toyama
ISHIKAWA Yoichi	JAMSTEC
IKKATAI Yuko	Kanazawa University
OSAWA Hirotaka	Keio University
OZAKI Taira	Kansai University
OZAWA Haruna	Tokyo City University
KAMATANI Kaoru	Ritsumeikan University
KIMURA Michinori	Lake Biwa Environmental Research Institute
KOZAKI Koji	Osaka Electro-Communication University
KOSUGI Motoko	Shizuoka University
TAKEUCHI Kazuhiro	Osaka Electro-Communication University
TAKEDA Hideaki	National Institute of Informatics
TAMURA Makoto	Ibaraki University
TOYOTA Tomoyo	University of Shimane
NISHINAKA Miwa	Kagawa University
NISHIMURA Shintaro	National Institute of Japanese Literature
MATSUURA Masahiro	Meiji University
YOSHIZAWA Takeshi	The University of Tokyo

Research Area

Ibaraki, Kanagawa, Shiga, Kyoto, Kyoto City, Shimane

List of Completed Projects

Fiscal Year Completed	Leader	Research Title
2006	HAYASAKA Tadahiro	Emissions of Greenhouse Gases and Aerosols, and Human Activities in East Asia
	KANAE Shinjiro	Global Water Cycle Variation and the Current World Water Resources Issues and Their Perspectives
	WATANABE Tsugihiko	Impact of Climate Changes on Agricultural Production System in the Arid Areas
	NAKAWO Masayoshi	Historical Evolution of the Adaptability in an Oasis Region to Water Resource Changes
	YACHI Shigeo	Multi-Disciplinary Research for Understanding Interactions between Humans and Nature in the Lake Biwa-Yodo River Watershed
2007	FUKUSHIMA Yoshihiro	Recent Rapid Change of Water Circulation in the Yellow River and Its Effects on Environment
	ICHIKAWA Masahiro	Sustainability and Biodiversity Assessment on Forest Utilization Options
	AKIMICHI Tomoya	A Trans-disciplinary Study on Regional Eco-History in Tropical Monsoon Asia: 1945-2005
2008	SEKINO Tatsuki	Interaction between Environmental Quality of the Watershed and Environmental Consciousness: With Reference to Environmental Changes Caused by the Use of Land and Water Resource
	TAKASO Tokushiro	Interactions between Natural Environment and Human Social Systems in Subtropical Islands
2009	SHIRAIWA Takayuki	Human Activities in Northeastern Asia and Their Impact on Biological Productivity in the North Pacific Ocean
2010	TANIGUCHI Makoto	Human Impacts on Urban Subsurface Environments
	YUMOTO Takakazu	A New Cultural and Historical Exploration into Human-Nature Relationships in the Japanese Archipelago
	SATO Yo-Ichiro	Agriculture and Environment Interactions in Eurasia: Past, Present and Future - A ten-thousand-year history
2011	KAWABATA Zen'ichiro	Effects of Environmental Change on the Interactions between Pathogens and Humans
	KUBOTA Jumpei	Historical Interactions between Multi-Cultural Societies and the Natural Environment in a Semi-Arid Region in Central Eurasia
	OSADA Toshiki	Environmental Change and the Indus Civilization
	UCHIYAMA Junzo	Neolithisation and Modernisation: Landscape History on East Asian Inland Seas
	UMETSU Chieko	Vulnerability and Resilience of Social-Ecological Systems
2012	OKUMIYA Kiyohito	Human Life, Aging and Disease in High-Altitude Environments: Physio-Medical, Ecological and Cultural Adaptation in "Highland Civilizations"
	SAKAI Shoko	Collapse and Restoration of Ecosystem Networks with Human Activity
	MOJI Kazuhiko	Environmental Change and Infectious Disease in Tropical Asia
2013	HIYAMA Tetsuya	Global Warming and the Human-Nature Dimension in Siberia: Social Adaptation to the Changes of the Terrestrial Ecosystem, with an Emphasis on Water Environments
	NAWATA Hiroshi	A Study of Human Subsistence Ecosystems in Arab Societies: To Combat Livelihood Degradation for the Post-oil Era
	KADA Ryohei	Managing Environmental Risks to Food and Health Security in Asian Watersheds
2014	MURAMATSU Shin	Megacities and the Global Environment
2015	KUBOTA Jumpei	Designing Local Frameworks for Integrated Water Resources Management
2016	HABU Junko	Long-term Sustainability through Place-Based, Small-Scale Economies: Approaches from Historical Ecology
	SATO Tetsu	Creation and Sustainable Governance of New Commons through Formation of Integrated Local Environmental Knowledge
	ISHIKAWA Satoshi	Coastal Area-capability Enhancement in Southeast Asia
	TANAKA Ueru	Desertification and Livelihood in Semi-Arid Afro-Eurasia
2017	ENDO Aiko	Human-Environmental Security in Asia-Pacific Ring of Fire: Water-Energy-Food Nexus
2018	NAKATSUKA Takeshi	Societal Adaptation to Climate Change: Integrating Palaeoclimatological Data with Historical and Archaeological Evidences
2019	OKUDA Noboru	Biodiversity-driven Nutrient Cycling and Human Well-being in Social-Ecological Systems
	TAYASU Ichiro	Proposal and Verification of the Validity of Isotope Environmental Traceability Methodology in Environmental Studies
2020	Steven R. McGREEVY	Lifeworlds of Sustainable Food Consumption and Production: Agrifood Systems in Transition
	KONDO Yasuhisa	Information Asymmetry Reduction in Open Team Science for Socio-environmental Cases
2021	KOZAN Osamu	Toward the Regeneration of Tropical Peatland Societies: Building International Research Network on Paludiculture and Sustainable Peatland Management
	YAMAUCHI Taro	The Sanitation Value Chain: Designing Sanitation Systems as Eco-Community-Value System
2022	YOSHIDA Takehito	Research and Social Implementation of Ecosystem-based Disaster Risk Reduction as Climate Change Adaptation in Shrinking Societies
	ONISHI Yuko	Methods and Tactics to Foster Knowledge Co-creation: A Practical Framework for Implementing Transdisciplinary Research
2023	KANEMOTO Keiichiro	Mapping the Environmental Impact Footprint of Cities, Companies, and Households
	SAKAKIBARA Masayuki	Co-creation of Sustainable Regional Innovation for Reducing Risk of High-impact Environmental Pollution
2024	PATRA, Prabir K.	An Interdisciplinary Study Toward Clean Air, Public Health and Sustainable Agriculture: The Case of Crop Residue Burning in North India
	NAKAGAWA Yoshinori	Development and Pluralistic Coexistence of Sustainability Visions Through Future Design

An Interdisciplinary Study Toward Clean Air, Public Health and Sustainable Agriculture: The Case of Crop Residue Burning in North India



What have we learned and to what extent?

We have explained the linkages between emissions from rice crop residue burning in Punjab and Haryana, two of the northwestern states of India, on particulate (PM_{2.5}) air pollution in Delhi national capital region (NCR). Contrary to original hypothesis, we are surprised to find PM_{2.5} exceeding 300 microgram per cubic-meter (µg m⁻³) in Punjab, lasting over weeks in November (Fig. 1). Our project also estimated the cost of high PM_{2.5} on human health and economic burden using commonly available methodology. Based on the field surveys and field experiments socio-economic models have been developed to assess farmers' limitations for noncompliance to zero crop residue burning policy of the governments. Surveys found that marginal farmers are resorting to land clearing through burning than the farmers with larger land-holding, as marginal farmers choose to grow more resilient rice cultivars (greater straw biomass) and receive lower priority in access to the modern machinery. We have put forward tangible solutions for crop diversification, rice straw management and air pollution monitoring in sustainable way. The timing of our project coincided with the national drive to improve air quality and thus the outcomes of the project are of relevance with immediate applications. New observations of high PM_{2.5} have been helpful to convince citizens and policymakers alike to act for clean air.

Our concept of global environmental studies

Global environmental problems are a plenty and most of those are enhanced by the pressure of human activity on planet Earth. In northwestern India, we focused on crop residue burning in Punjab and Haryana as a cause of air pollution in Delhi-NCR. It is well known that burning of dry matter release a lot of particulate and gaseous air pollutants to the atmosphere that are transported far distances inside and across national boundaries. The crop residue burning in the region is caused by a shear pressure of crop intensity increase in the past few decades to feed hundreds of millions of populations. Thus, a small regional or a local scale human activity can cause global problem if grown unsustainably and left uncontrolled knowingly. We are in a fast-changing

world and new environmental problems appears more frequently than ever before. Improved surveillance, prompt action and long-term monitoring will be required for minimizing the cost on the society.

New connections

Our project members are striving to make new connections, be it for (1) wider and denser coverage of air pollution measurements to support the Air Quality Early Warning System (AQ-EWS), (2) development of infrastructure to manage crop residue for the benefit of farmers through industrial use, or (3) establish supply chain to process and market products from crop diversification. New projects have been developed for better understanding the satellite-derived fire emissions, PM_{2.5} measurement (currently out of phase with FDC, as suggested by Fig. 1), and to aid the AQ-EWS. Networking between Japanese and Indian researchers is going strong on crop diversification and application of biochar in joint carbon-credit mechanism. Indian researchers are also showing strong interests on precise assessment of health and economic burdens of air pollution.

Project Leader

PATRA, Prabir K.

Research Area

North India

<https://aakash-rihn.org/en/>

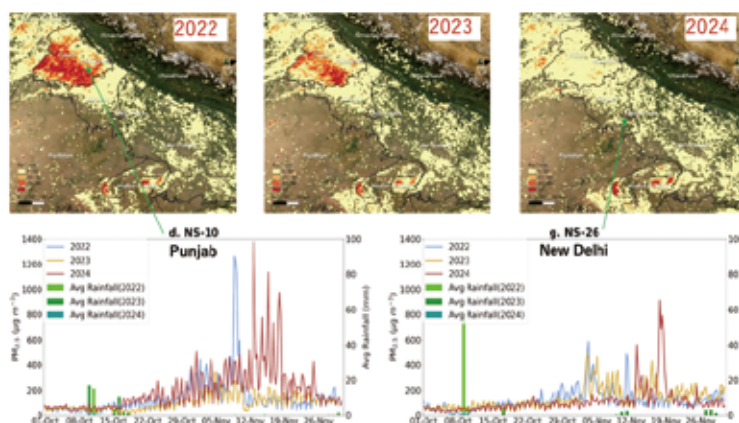


Figure 1 Satellite fire detection count (FDC) on the ground show decrease during 2022-2024 (top row; left to right), but the measurements of PM_{2.5} using CUPI-G sensors show increasing trends in Punjab and Delhi-NCR (bottom row; colored lines).

Development and Pluralistic Coexistence of Sustainability Visions Through Future Design

We developed a method by which stakeholders within a region or organization can adopt the perspective of future generations and create their own visions of a sustainable society. We also

clarified why the dissemination of such methods throughout society can contribute to the realization of sustainability.

What have we learned and to what extent?

(1) We developed a method by which stakeholders within a region or organization can adopt the perspective of future generations and create their own visions of a sustainable society. Specifically, this included:

- ① Producing picture-story videos to introduce the perspective of future generations (four in Japanese and four in English, for a total of eight);
- ② Refining the Past Design method as an introduction to incorporating the perspective of future generations;
- ③ Organizing variations in ways to set discussion themes for group work conducted by future generations;
- ④ Developing a method to extract narratives on visions from the outcomes of group work discussions.

Among these, (④) is regarded as the most important achievement.

(2) We also clarified why the dissemination of the method described in (1) throughout society can contribute to realizing a sustainable society. Specifically, through applications of this method to various cases, we found that its effects include the following (see Figure 1 for details):

- ① Individuals can acquire a sense of wanting to protect the interests of future generations without having it imposed by others.

- ② They become less likely to avert their eyes from inconvenient matters expected to occur in the future.

- ③ They can overcome the status quo bias of expecting tomorrow to be the same as yesterday and today.

- ④ People who have experienced the role of future generations can build networks with each other.

- ⑤ Rigid relationships among actors, caused by conflicting interests, can be softened.

With these features, Future Design can also be used in combination with methods such as backcasting and participatory technology assessment, making it highly versatile.

Our concept of global environmental studies

Looking back at history, it is common for social transformation to take 50 or even 100 years. I believe that global environmental studies should clarify how to build mechanisms that allow researchers, government agencies, private companies, and citizens to work together to continuously discuss three key points:

- ① What should society look like at the ultimate goal of transformation?
- ② Where are we now within this long process of transformation?
- ③ How do we wish to reach the ultimate goal?

Future Design also aims to address these questions.

New connections

The Future Design Project will conclude this year, but collaborations with the Sustai-N-able Project, the Fashlocks Project, the SceNE Project, and others will continue.

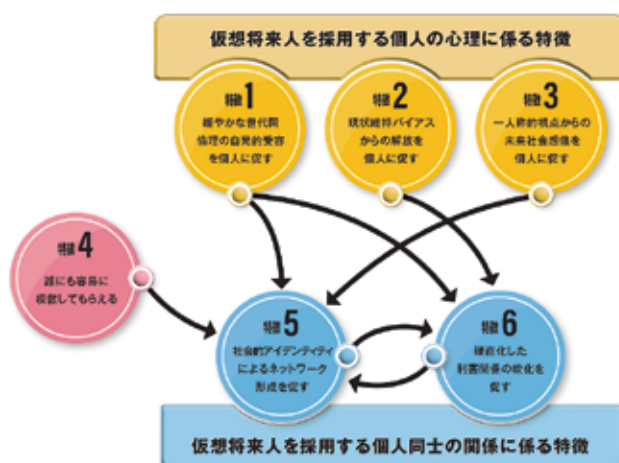


Figure 1 Effects of Future Design

Project Leader

NAKAGAWA Yoshinori

Designated Research

Apart from the projects based on the Research Programs, this Designated Research contributes to the achievement of the mission of the Research Institute for Humanity and Nature (RIHN) in response to social demands for the formation of integrated research in the field of global environmental studies and the solution of global environmental problems. This Designated Research will be conducted in close collaboration and cooperation with the Research Programs and Projects, and will share the results. Designated Research consists of the following projects.

Projects promoted by the National Institutes for the Humanities (NIHU)

Multidisciplinary collaborative projects

Object-based Research of Nature-human Interactions up to the Anthropocene	FY2022-2027
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(Lead institute: RIHN)

Humanity living in nature have made use of a wide variety of resources from the environment. The goal of this project is to study the relationship between nature and people along temporal and spatial axes by analyzing the concentrations and isotope ratios of elements contained in the human body and substances, and to clarify the changes in human resource usage that lead to modern global environmental problems from the perspective of material culture. In addition to conducting collaborative research with the National Museum of Ethnology on the ancient Andes, the academic collaboration will be done also with universities and research institutes inside and outside NIHU. (Principal Researcher: TAYASU Ichiro)

Interdisciplinary and Integrated Studies on Local Cultures: Aiming for the Emergence of Novel Communities	FY2022-2027
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(Lead institutes: REKIHAKU and MINPAKU)

RIHN will promote research as “Regional Culture Studies to Avoid Disasters by Utilizing the Bounties of Nature” unit, one of the five units under the project, and will implement the inheritance and local application of regional culture related to the bounties of nature and disasters in regions throughout Japan. (Unit Representative: TANIGUCHI Makoto)

Co-creation Outreach - NIHU Knowledge Co-creation Projects

RIHN will also play a part as project, which aims for co-creation of knowledge and open humanities research.

NIHU Interactive Museums	FY2022-2027
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A “circulation of knowledge” between universities, other research institutions, and society will be created by using digital technology to prepare materials and data owned by NIHU's institutes, visualize them through museums and various exhibitions, and share and publish research processes and results by various methods and in various places. In this way, the aim is to build a model for promoting open humanities research through co-creation with various people in Japan and overseas. Moreover, joint research will be conducted to solve communication challenges, such as visual and auditory difficulties, and, based on the results, to develop exhibition methods that support diversity.

Director-General's Discretionary Budget Project

This research is funded by the RIHN Director-General's Discretionary Budget. Applications are solicited and accepted within RIHN once a year.

Grants-in-Aid for Scientific Research (KAKENHI) Project

The Grant-in-Aid for Scientific Research is a research grant program of the Ministry of Education, Culture, Sports, Science and Technology (MEXT), which aims to promote the development of outstanding, original, and pioneering research in all fields from humanities and social sciences to natural sciences in order to promote science in Japan.

Environmental Isotope Study Collaborative Research Program

The Environmental Isotope Study Collaborative Research Program provides an environment in which domestic and foreign researchers can use laboratory facilities and equipment to effectively conduct cutting-edge joint research, and also widely used by the academic community, such as by publishing the results of past research activities on its website.

■ What is Environmental Isotope Study?

In research on the global environment, although the target regions and time scales are diverse, various elements make up ecosystems such as water, the atmosphere, organisms and soil; human activities and their history; and all human and natural phenomena.

Within the interacting ring, there is an inherent “fingerprint” of the stable isotope ratio of the element. RIHN has developed experimental equipment that can obtain this fingerprint information for various environmental substances and many elements. It is an important mission to conduct research that contributes to solving global environmental problems through these analyses. At RIHN, we call this research “Environmental Isotope Studies” and have been conducting joint research with researchers nationwide since 2012.

■ Program outline

The Environmental Isotope Study Collaborative Research Program uses isotope method which is used in subdivided specialized academic fields, such as geochemistry, hydrology, ecology, geology, mineralogy, anthropology, food science (locality determination), and forensic science. The isotope method, which is used in specialized academic fields, is used in a wide range of environmental studies. The Environmental Isotope Study Collaborative Research Program accepts applications from a wide range of fields for “General Collaborative Research” and “Laboratory and Analysis Divisional Collaborative Research,” which involves the development of new analytical methods in the close collaboration with the Laboratory and Analysis Division. In addition, the “NIHU Joint Research” program was launched in FY2020 to strengthen collaboration with institutions of the National Institutes for the Humanities. From FY2022, we started the “ORNHIA-Joint Research” collaborative publicly solicited joint research with the Multidisciplinary Collaborative Projects of NIHU “Object-based Research of Nature-Human Interactions up to the Anthropocene (ORNHIA).”

Participants in the “Online Guidance for Laboratory Users” (held in June every year) will learn how to use the common equipment and the pre-treatment that needs to be done in advance, and will present their research results at the “Symposium on Environmental Isotope Study” (held in December every year). The Symposium on Environmental Isotope Study provides an opportunity for students and young researchers to make new discoveries and research seeds by receiving a wide range of opinions that cannot be obtained through discussions in laboratories or individual academic societies. In addition, we have set up a session, “Development and application of environmental traceability methods,” at the Japan Geoscience Union (JpGU) meeting, which is being used to disseminate our research results. Taking advantage of the COVID-19 crisis, we created online video teaching materials, provided online guidance, and held a hybrid Symposium on Environmental Isotope Study. In addition, commentary on environmental isotope studies and research results to date are available on the website of The World as Illustrated by Environmental Isotope Studies. (<https://www.environmentalisotope.jp/>)

In FY2025, 55 “General Collaborative Research” proposals, seven “Laboratory and Analysis Divisional Collaborative Research” proposals, and 18 “ORNHIA-Joint Research” collaborative research proposals were selected for the Environmental Isotope Study Collaborative Research Program. In addition, between FY2012 and FY2024, 56 national and public universities, 19 private universities, 34 national and public research institutes, and 20 overseas universities and research institutes have used this program. For more information, including application guidelines, please visit the website.

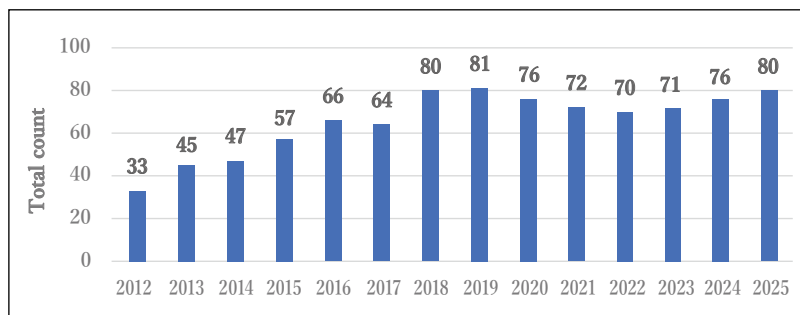
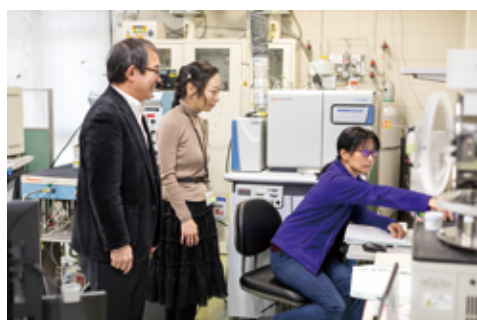
Laboratory facilities

RIHN conducts joint research in various regions in Japan and abroad, and handles a wide variety of research samples. By extracting various types of environmental information from these samples and comprehensively understanding the relationships among them, it is possible to clarify the interaction between humans and nature that is causing global environmental problems. Researchers from Japan and overseas (263 researchers from 63 institutions in FY2024) involved in research projects and the Environmental Isotope Study Collaborative Research Program conducted by RIHN are using the laboratory facilities at RIHN to conduct research aimed at solving global environmental problems.

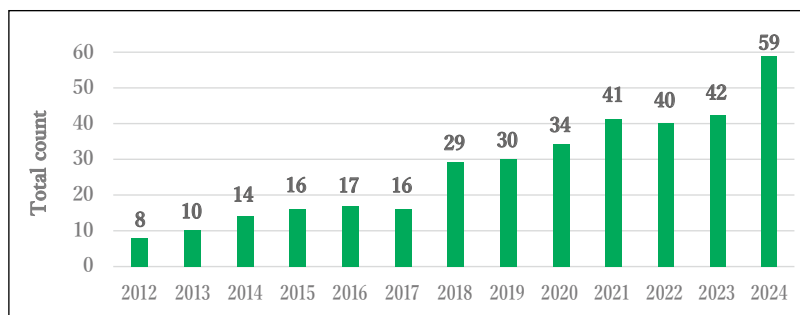
Equipment and devices

RIHN has 18 laboratories. There is a clean room where samples are processed in a contamination-free environment, a low-temperature storage room where samples such as organisms and ice cores are stored, and a temperature-controlled room where organisms are grown in an artificially controlled environment. It enables the development of ongoing environmental research. In addition, we are focusing on

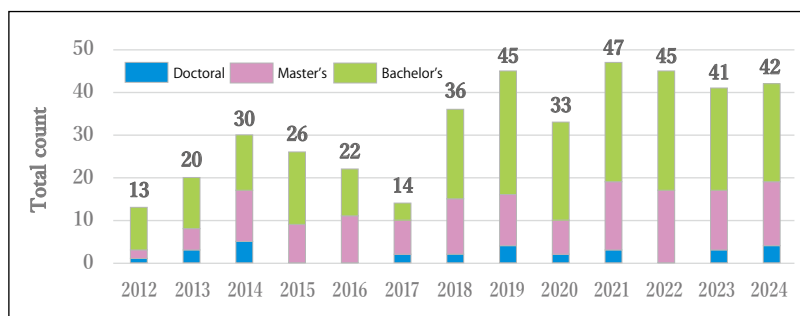
advanced common equipment that is highly versatile and expected to develop into new global environmental research. In addition to experimental equipment such as microscopes and field observation equipment such as surveying equipment, stable isotope ratio mass spectrometers (IRMS) for light elements, a thermal ionization mass spectrometer (TIMS), a high-resolution multi-collector inductively coupled plasma mass spectrometer (MC-ICP-MS), an inductively coupled plasma mass spectrometer (ICP-MS), a Cavity Ring-Down Spectroscopy for water isotope ratios, and a gamma-ray spectrometer for dating, etc. are installed. The information of analytical techniques and methods for identifying trace elements and stable isotopes have been developing rapidly in recent years, and we are equipped with state-of-the-art analytical equipment to acquire highly accurate information. For information on using common equipment, please visit the RIHN laboratory facilities website.



The number of accepted proposals for the Collaborative Research Program



The number of published paper as research results of the Collaborative Research Program



The number of dissertations by using common equipment

Fundamental Research Department

The Fundamental Research Department provides support across the institute's various research activities. Its roles include implementing international collaborative research with universities and institutions in Japan and abroad; promoting institutional partnerships and international networks; developing advanced environmental analysis techniques; collaborating in higher education with universities; and facilitating the smooth archiving and sharing of research materials and data.

Laboratory and Analysis Division

The division promotes the use of laboratory facilities and common equipments to develop integrated collaborative research with interdisciplinary researchers. To ensure the fair and efficient laboratory use, the division maintains its facilities in cooperation with other research projects, and publishes information on website, regarding laboratory facilities, equipments, stored samples and usage method. Additionally, the division provides technical measurement support, online guidance, weekly information exchanging meeting and research seminars for laboratory users. Furthermore, the division develops a new experimental method for advanced environmental information, and compiles updated method into a manual to distribute online video materials for users.

Main Commitments

- Management and operation of laboratory facilities and common equipment
- Promotion of Environmental Isotope Study Collaborative Research Program (see pp. 44-45)
- Contribution to advanced collaborative research for both inside and outside RIHN.

Head

TAYASU Ichiro

Professor

Main Members

SHIN Ki-Cheol

Associate Professor

YABUSAKI Shiho

Senior Researcher

YOSHIMIZU Chikage

Senior Researcher



Please feel free to inquire of divisional members about collaborative research and laboratory facilities.



Scan for details

Information and Planning Division

This division manages the institute's information infrastructure, including internal networks and servers, and implements cybersecurity for institute-operated systems. It operates the RIHN Archives and institutional repository for managing research materials and supports knowledge-sharing functions. It also fosters collaboration with external researchers and institutions and assists in disseminating research findings.

Main Commitments

- Design, maintenance, and enhancement of the institute's information infrastructure
- Collection and management of research materials and support for knowledge-sharing functions
- Long-term design of the institute's information systems
- Building and strengthening collaboration with external institutions
- Gathering useful data and resources for RIHN research
- Strengthening links with domestic/international institutions and initiatives

Head

FUKAZAWA Keiichiro

Professor

Main Member

ISHII Reiichiro

Associate Professor



The core machine of the RIHN network

Education Division

The Education Division operates the RIHN program within the SOKENDAI Graduate School and supports its students. It aims to establish educational practices in Global Environmental Studies and to foster diverse talent. The section organizes participatory activities and educational support for all age groups—from youth to seniors—to help individuals take informed environmental action.

| Main Commitments

- Operation and student support of the RIHN course in the SOKENDAI Graduate School
- Practice of Global Environmental Studies education
- Development and utilization of educational materials and programs

Head

ASARI Misuzu

Professor

Main Member

KONDO Yasuhisa

Professor



Shadowing programs for high school students



Guest lessons at elementary schools

Knowledge Networks Division

This division develops strategic plans to enhance the international visibility of RIHN's research and activities, strengthens collaboration with global networks and partners, and promotes cultural approaches in environmental research. It also supports the publication of international research outputs and builds the capacity of young researchers.

| Main Commitments

- Collaboration with Future Earth networks (see p. 49)
- Promotion of RIHN approaches to broader research communities
- Support for international publications from RIHN
- Capacity building for young researchers within and outside RIHN

Head

NILES, Daniel

Professor



Lecture at RIHN by Prof. Ortwin Renn (IASS, Germany) on interdisciplinary environmental research

Affiliated Centers of the Fundamental Research Department

RIHN hosts and collaborates with several centers that contribute to climate adaptation and sustainability.

Green Knowledge Center (GKC)

GKC promotes carbon neutrality, circular economy, and nature positivity by fostering “green talent” and co-creating a knowledge infrastructure through academia-industry-government collaboration.

- Hosts the Secretariat of the University Coalition for Carbon Neutrality
- Organizes general meetings and symposia
- Supports daily activities of five Working Groups

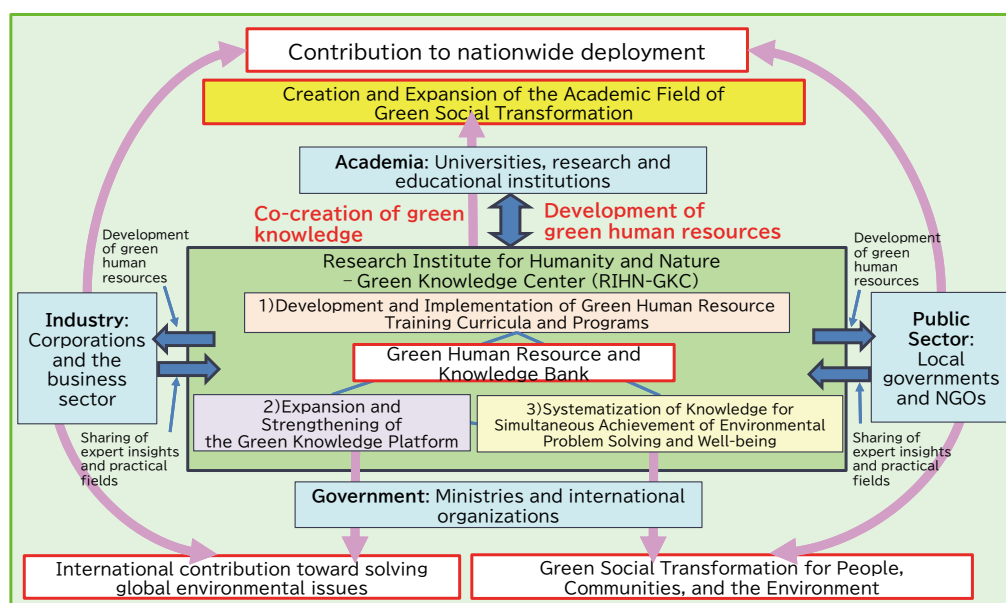
Head

ASARI Misuzu

Professor

Reference: Research Institute for Humanity and Nature – Green Knowledge Center (GKC)

Established in April 2025, the GKC aims to leverage the unique characteristics, history, and achievements of RIHN as an inter-university research institute and a hub for interdisciplinary research. By serving as a hub for diverse stakeholders, regions, and themes, it seeks to foster connections and cultivate human resources, contributing to the resolution of global environmental challenges and the construction of a sustainable society.



University Coalition for Carbon Neutrality

The University Coalition for Carbon Neutrality promotes initiatives toward a carbon-neutral society from universities and research institutions to local communities, the nation, and the world.

With support from MEXT, METI, and MOE, the Coalition brings together 215 institutions working through five working groups: Zero Carbon Campus, Regional Zero Carbon, Innovation, Human Resource Development, and International Collaboration.

The Green Knowledge Center serves as the secretariat, organizing meetings and symposia and supporting daily activities.



Promotional video and materials
for the University Coalition for
Carbon Neutrality (Japanese)

Future Earth Center

The RIHN-FE Center is newly established in FY2025 with the mission of providing leadership and coherence to the Future Earth network in Japan, advancing **Asian perspectives** on sustainability, bringing regionally grounded insights to global challenges. The Center is committed to **building transdisciplinary capacity**, especially among early-career researchers, equipping them to co-produce actionable knowledge.

Head

LAMBINO, Ria Adoracion Apostol Specially Appointed Specialist



Photo 1: Future Earth Asia, RIHN, Asia Pacific Network, Australia National University and International Science Council Regional Focal Point for Asia and the Pacific at the Incubation Workshop for the Asia Science Mission at RIHN, October 22, 2024.

RIHN is part of the consortium hosting the **Future Earth Japan Global Secretariat Hub (FE Japan Global Hub)**, together with Nagasaki University, The University of Tokyo, Hokkaido University, the AEON Environmental Foundation, and other partners. Future Earth is a global network of researchers and innovators driving sustainability transformations. The **FE Japan Global Hub** is part of a distributed secretariat that coordinates global research projects, strengthens cross-thematic and cross-regional collaboration, engages with key international partners, and helps shape research agendas at international, regional, and national levels.



Photo 2: Participants taking on stakeholder hats and engaged in discussion during a Stakeholder Analysis Role-playing workshop at the December 2024 TERRA+ School.

Building on RIHN's leadership as host of the **Future Earth Regional Center for Asia** since 2014, the **RIHN-FE Center** undertakes several core functions:

- Hosting the **Asia Science Mission**, a pilot initiative under the International Science Council contributing to the **UN International Decade for Sciences and Sustainable Development**.
- Supporting the **Future Earth Asia Regional Committee**.
- Strengthening outreach and capacity-building through **TERRA+ School**, a transdisciplinary training program for early-career researchers and professionals.
- Supporting the **Future Earth Japan National Committee** and advancing science-policy engagement.
- Contributing to the **Knowledge-Action Network on Systems of Sustainable Consumption and Production**, fostering cross-sectoral collaboration.
- Disseminating research findings and insights through targeted, strategic communication.

futureearth
Research. Innovation. Sustainability

**ASIA
SCIENCE
MISSION**
FOR SUSTAINABILITY

Uehiro Research Center for Japan Environmental Studies

The Uehiro Research Center for Japan Environmental Studies was established in April 2024 to:

- (1) establish and promote Japan Environmental Studies in Japan and beyond;
- (2) explore ways to regenerate the “in-between” realm between humans and nature — homogenized by Japan’s exogenous modernization — by rediscovering traditional and indigenous sensibilities that connect people with nature; and
- (3) foster individuals capable of co-creating dynamic commons values across local, national, and global scales in collaboration with local communities.

Head YOSHIKAWA Narumi Specially Appointed Professor

Main Members AKIYAMA Tomohiro Specially Appointed Associate Professor

What is “Japan Environmental Studies”?

“Japan Environmental Studies” explores the future possibilities of humans and nature beyond anthropocentrism by co-creating an integrated ecosystem without dividing humans and nature. This research center was established as a sponsored research department through a donation from the Uehiro Foundation on Ethics and Education.

By transcending anthropocentrism and co-creating holistic ecosystems, “Japan Environmental Studies” aims to explore future possibilities for humans and nature.



In January 2025, a joint international symposium with RIHN was held at Kiyomizu-dera Temple, where experts in primatology, anthropology, and philosophy examined animistic worldviews and the contemporary relevance of the “Awai” — the relational space between humans and nature — as a way to rethink cosmologies beyond anthropocentrism.



In September 2024, a pre-kick-off meeting featured Professor HARA Takeshi (Waseda University, Emeritus), who led discussions on the meaning and significance of Japan Environmental Studies, followed by a field visit to the Hanase area of Kyoto to reflect on the cultural foundations of Japan’s environmental thought.



International symposium at Otowasan Kiyomizu-dera Temple: “DANCE WITH ALL: On Animals and Anima”

Graduate Education

Since its founding, RIHN has provided opportunities in education by involving graduate students in research activities under RIHN projects, “Cooperative research program on Environmental Isotope Study” and so on. Starting in April 2023, RIHN launched Global Environmental Studies Program

in the Graduate Institute for Advanced Studies, SOKENDAI and has been engaging in research supervision for students wish to obtain a degree in various academic fields related to Global Environmental Studies.

Global Environmental Studies, Graduate University for Advanced Studies, SOKENDAI

Graduate University for Advanced Studies, SOKENDAI

The Graduate University for Advanced Studies, SOKENDAI, is an independent graduate university (the first of its kind in Japan) founded in 1988 with the aim of contributing to the creation and development of culture through education and research in academic theory and application. As a world-leading international graduate university, SOKENDAI operates in close partnership and collaboration with affiliated inter-university research institutes. The world-class research environment which the inter-university research institutes offer is the most distinctive feature of SOKENDAI.

To nurture PhDs who can tackle complex and interdependent issues arising in the context of ever-changing academic trends and the ever more pressing demands of modern society, it is necessary to develop a system that allows the flexible use of highly specialized resources across a wide range of disciplines. To achieve this goal, SOKENDAI has reorganized its educational structure and established the Graduate Institute for Advanced Studies on April 2023. At the same time, RIHN was incorporated into SOKENDAI as parent institutes to launch Global Environmental Studies Program.

Introduction of Global Environmental Studies Program

In a characteristic research environment of RIHN with interdisciplinary and transdisciplinarity approach in collaboration with society, the Global Environmental Studies Program is designed to train independent researchers who set research agenda and conduct research based on their own expertise. To encourage students to gain knowledge and methodologies accumulated in the academic fields that constitute Global Environmental Studies and to become independent researchers who will engage in solving global environmental issues with their expertise. The program provides small-group education and research training in an environment conducive for cutting-edge research.

- Doctoral Program: Three-year doctoral program
- Degree: Doctor of Philosophy
- Career Opportunities for Graduates:
 - Faculties engaged in education and research on environmental studies at universities and other institutions of higher education

- Engineers, researchers, and support staff in environment-related fields at companies, government offices, national and public research institutes, local governments, international organizations, and NGOs
- Researchers and curators at museums and other institutions

Number of Students in the Program (as of April 1, 2025)

	Domestic	International	Total
1st year	0	1	1
2nd year	5	1	6
3rd year	0	0	0
Total	5	2	7

For Prospective Students

• Type of Students we seek

The Global Environmental Studies Program seeks students who have a strong interest and motivation in research related to Global Environmental Studies, and who have the will and enthusiasm to thrive internationally, constantly honing their rich intellect and sensitivity, aiming for practical research that will open up a new field of research while taking a comprehensive view of the entire field of study, not limited by existing disciplines.

• Selection of Students for Admission

In selecting students for the Program, we place importance on basic academic skills, research planning ability, and logical thinking ability to promote research independently in the field of Global Environmental Studies. To properly judge such abilities, the selection process will focus on research and social experience prior to admission, including research during master's degree programs, the specificity and feasibility of research to be conducted after admission, and the ability to conduct such research.



At the April 2024 Entrance Ceremony

List of Faculty Members, 2025 *As of April 1st, 2025

Cultural and Social Studies

Name	Expertise	Research topic
DWYER, Janet Caroline Professor	Policy analysis, Agri-rural economics, Sustainable development, Participatory action research	Satoyama reconnections via sustainable agriculture, environment and rural development policies and practice
KONDO Yasuhisa Professor (Chair)	Archaeological geography, Transdisciplinary methodologies	Currently setting up international joint research projects on (1) the submerged landscape of Japanese archipelago during the late Pleistocene, (2) the archaeological geography of southeastern Arabia, and (3) the uniqueness of transdisciplinary research in Japan
MATSUDA Motoji Professor	Cultural anthropology, Environmental sociology	Conflict and dialogue between culture and science at field sites where global environmental issues arise, and exploration of convivial relationship between them
NILES, Daniel Professor	Geography	Human-environmental geography specializing in sustainability studies, material culture, and environmental knowledge
OYAMA Shuichi Professor	Area studies (Sub-Saharan Africa), Geography	Building up organic material circulation system among urban and rural area
YOSHIKAWA Narumi Professor	Agricultural economics, Japan environmental studies	Focusing on environmental issues at the boundary between humans and nature, which is becoming increasingly homogenized, analyzes social acceptability regarding ecological values latent in traditional and indigenous knowledge in Japan, and explores future possibilities for humans and nature.
AKIYAMA Tomohiro Associate Professor	Environmental studies, Cosmology, Anthropological studies, Civilization studies	Integral studies and integral practices for humanity and nature
WONG, Grace Associate Professor	Forest and natural resource economics, Development studies	Research focuses on social-environmental justice and politics of forest frontiers, social forestry, and climate change.

Physical Science

Name	Expertise	Research topic
ASARI Misuzu Professor (Vice-Chair)	Environmental engineering, Sound material-cycle society	Waste management, 3Rs (reduce, reuse, and recycle) policies, environmental management system at universities, and environmental education
TANIGUCHI Makoto Professor	Hydrology	Research on issues linking a region and the earth such as the linkage between water, energy, and food, and climate change
SHIN Ki-Cheol Associate Professor	Petrology, Geochemistry, Isotope geology	Research on the environmental assessment of global environmental studies, utilizing traceability methods based on isotopic and geological information of metallic elements
WATANABE Tsuyoshi Associate Professor	Earth environmental sciences	High-resolution reconstruction of resilient indigenous lifestyle in environmental changes to future
YASUMOTO Jun Associate Professor	Hydrology, Agricultural engineering	Land-sea interaction through the hydrological cycle and assessment of the impact of climate change and changes in social structure on natural resources (e.g., water resources, fisheries resources, etc.) that straddle land and sea

Mathematical and Information Science

Name	Expertise	Research topic
FUKAZAWA Keiichiro Professor	Upper Atmosphere, High performance computing, Numerical simulation	Research on space weather, atmospheric temperature, and animal behavior using numerical simulation

Life Science

Name	Expertise	Research topic
HAYASHI Kentaro Professor	Biogeochemistry, Soil science	Research on nitrogen cycling based on biogeochemical studies and integrating various fields for sustainable nitrogen use for future generations
SHOBAYASHI Mikitaro Professor	Agriculture and agri-environmental policies, Water resources policies, Rural development, Agricultural economics	Research on policies to improve the relationship among agriculture, the environment, land and water resources
TAYASU Ichiro Professor	Isotope ecology, Environmental isotope study	Research on the relationship between organisms and the environment, ecosystems, and the global environment through stable isotope analysis of elements contained in organisms, water, and environmental samples, and research on environmental traceability (provenance and history estimation) based on isotopic information
HONGO Shun Associate Professor	Conservation science, Wildlife management, Mammal ecology, Primatology	Development of wildlife monitoring and hunting management based on local knowledge and science
ISHII Reiichiro Associate Professor	Theoretical ecology	Research aimed at elucidating the sustainability of ecosystems and biodiversity and their conditions under multiple human activities using diverse ecosystem observation data and modeling methods

Opportunities for Overseas Researchers to Spend Time at RIHN

RIHN has established two programs to enable overseas researchers to spend several months at the Institute, engaging in research and interacting with other RIHN researchers. The basic idea is that such visits benefit both the researcher and the Institute. The programs are open to researchers based outside of Japan (including those with Japanese nationality) and researchers based in Japan with a nationality other than Japanese. Candidates for both schemes are selected competitively.

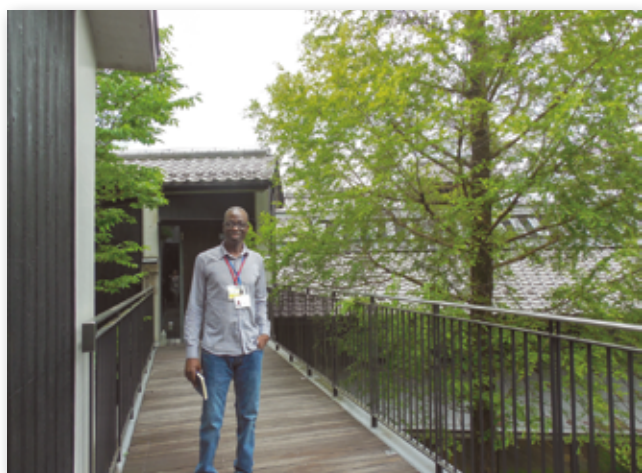
Invited Scholar

The RIHN Invited Scholar Program enables overseas researchers to spend between one and three months at RIHN and to contribute to the development of the Institute's intellectual foundations and strategic directions. Invited Scholars should be widely recognized in their fields and able to provide a strategic overview of the relevance of their disciplinary or interdisciplinary studies to RIHN's engagement in global environmental studies. Invited Scholars are selected based on nomination by RIHN faculty members who act as their host. Invited Scholars are employed by RIHN during their stay and receive a stipend.



Visiting Research Fellow

The RIHN Visiting Research Fellow Program brings overseas researchers to the Institute for periods of two to six months to engage in specific research in the context of one of the RIHN Programs, Projects, Divisions, Centers or Units. Visiting Fellows are not employed by RIHN, but their travel, accommodation and daily expenses are covered by an allowance. Visiting Fellows are selected based on applications from the candidates themselves. RIHN faculty members act as hosts during the stay and candidates are required to identify and consult with potential hosts before applying.



Communication with Society and the Research Community

In order to widely disseminate its research results to society, RIHN holds symposiums, seminars, and other events for the general public and researchers. We also actively publish a variety of publications related to integrated global environmental studies.

Major events

| For Researchers

- RIHN International Symposium

RIHN holds an annual symposium for the domestic and international research community with the aim of disseminating the results of RIHN's research to the world.

- Symposium on Environmental Isotope Study

Held once a year for the purpose of developing and disseminating the latest analytical techniques and exchanging information on environmental research.

- RIHN Seminars

Invited foreign researchers in residence at RIHN and outside experts serve as lecturers in these open seminars for researchers to share the latest topics and research trends on global environmental issues and to view global environmental studies from a broad perspective.

| For the general public

- RIHN Public Seminars

These seminars are held once or twice a year at either RIHN or other venues to introduce the results of RIHN's research and trends in global environmental issues to the general public in an easy-to-understand manner.

- RIHN Open House

Since FY2011, RIHN has been holding Open House events to introduce the facilities and research activities of RIHN to the general public in order to deepen interaction, especially with the local community. We are implementing plans to make the RIHN more accessible to the society.

Major publications

| RIHN Series (for general public)

RIHN publishes a series of books that introduce the research results of the Institute in an easy-to-understand academic manner. So far, 27 volumes have been published.



| RIHN Series (for researchers)

This is a publication that presents the results of RIHN's research to researchers. So far, 14 volumes have been published.



| RIHN News (Humanity & Nature Newsletter)

The Humanity & Nature Newsletter provides up-to-date information on the activities of RIHN, including field reports, staff profiles, and round-table discussions. It aims to function as a communication tool, especially for domestic and international researchers and the general public who are involved with RIHN.



| RIHN Book Series

This Book series publishes RIHN research results for the international community. Ten volumes have been published so far and have been accessed approximately 137,000 times online.



Website and Social Media

The website provides basic information about RIHN and its latest activities. We also provide information on events and research results through social networking services.



| Website www.chikyu.ac.jp/rihn_e/



| X (Twitter) @CHIKYUKEN



| Facebook @RIHN.official/

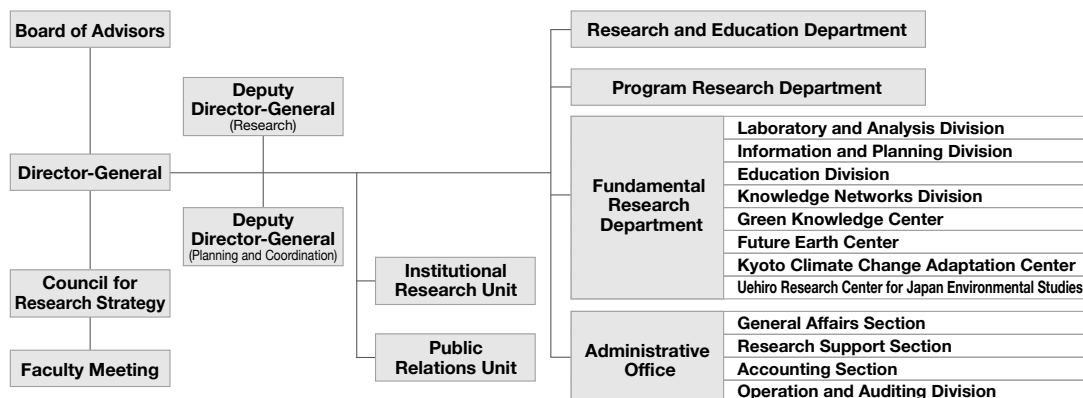


| YouTube @CHIKYUKENofficial



Institute Information

Organization *As of April 1st, 2025



YAMAGIWA Juichi	Director-General	ASARI Misuzu	Head of Green Knowledge Center
TAYASU Ichiro	Deputy Director-General (Planning and Coordination), Director of Fundamental Research Department, Head of Laboratory and Analysis Division, Head of Institutional Research Unit	LAMBINO, Ria	Head of Future Earth Center
ASARI Misuzu	Deputy Director-General (Research), Director of Research and Education Department, Director of Program Research Department, Head of Education Division	YASUNARI Tetsuzo	Head of Kyoto Climate Change Adaptation Center
FUKAZAWA Keiichiro	Head of Information and Planning Division	YOSHIKAWA Narumi	Head of Uehiro Research Center for Japan Environmental Studies
NILES, Daniel Ely	Head of Knowledge Networks Division	OKADA Saeko	Head of Public Relations Unit

Boards and Committees *As of April 1st, 2025

Board of Advisors

Oversees personnel, planning, administration and operation of the institute

ASAOKA Mie	President, Kiko Network/Lawyer	SHINODA Kenichi	President, National Museum of Nature and Science
KAMEYAMA Yasuko	Professor/Director, Sustainable Society Design Center, Graduate School of Frontier Sciences, the University of Tokyo	TAKENAKA Chisato	Emeritus Professor, Nagoya University
KOBAYASHI Izumi	Independent Outside Director, ANA Holdings Inc.	UCHIDA Yukiko	Professor/Director, Institute for the Future of Human Society, Kyoto University
KOBAYASHI Tadashi	Emeritus Professor, Osaka University/Specially Appointed Professor, Center for the Study of Co* Design, Osaka University/Director-General, Research Institute of Science and Technology for Society, Japan Science and Technology Agency	TAYASU Ichiro	Deputy Director-General, RIHN
NAGAO Seiya	Director, Institute of Nature and Environmental Technology, Kanazawa University	ASARI Misuzu	Deputy Director-General, RIHN
SATO Jin	Professor, Institute for Advanced Studies on Asia, the University of Tokyo	MATSUDA Motoji	Program Director, RIHN
		SHOBAYASHI Mikitaro	Program Director, RIHN
		TANIGUCHI Makoto	Program Director, RIHN

Council for Research Strategy

Oversees research strategy, personnel, project, and evaluation system

YAMAGIWA Juichi	Director-General	SHOBAYASHI Mikitaro	Program Director	NILES, Daniel Ely	Professor
TAYASU Ichiro	Deputy Director-General	TANIGUCHI Makoto	Program Director	SATO Hideo	Administrative Director
ASARI Misuzu	Deputy Director-General	FUKAZAWA Keiichiro	Professor		
MATSUDA Motoji	Program Director	KONDO Yasuhisa	Professor		

External Research Evaluation Committee

External review of research project proposals

<i>Domestic</i>		YOSHIDA Naohiro	Professor Emeritus, Tokyo Institute of Technology/Fellow, Earth-Life Science Institute (ELSI), Tokyo Institute of Technology/Executive Researcher, National Institute of Information and Communications Technology (NICT)
YUMOTO Takakazu	Emeritus Professor, Kyoto University	HAYASAKA Tadahiro	Professor, Center for Atmospheric and Oceanic Studies, Graduate School of Science, Tohoku University
HARUYAMA Shigeko	Emeritus Professor, Mie University		
MUTO Megumi	Vice President/Chief Sustainability Officer (CSO), Japan International Cooperation Agency (JICA)		
MOJI Kazuhiko	Professor, Graduate School of Tropical Medicine & Global Health, Nagasaki University		
<i>Overseas</i>		STRIER, Karen B.	Vilas Research Professor & Irven DeVore Professor, Department of Anthropology, University of Wisconsin–Madison, U.S.A.
CHABAY, Ilan	Research Professor, Global Futures Lab, School for Complex Adaptive Systems and Director, ASU Decision Theater at Barrett & O'Connor Center, Washington, DC; Arizona State University (ASU), U.S.A.	HELGESON, Jennifer F.	Research Economist, Acting Program Manager, National Institute of Standards and Technology, U.S.A.
AILIKUN	Professor, Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Beijing, China	HISCOCK, Kevin	Professor of Environmental Sciences, School of Environmental Sciences, University of East Anglia, UK
DIAZ, Sandra	Professor, Universidad Nacional de Cordoba, Argentina	MEINZEN-DICK, Ruth	Senior Research Fellow, The International Food Policy Research Institute (IFPRI), U.S.A.
JOULIAN, Frederic	Professor, EHESS, France		
KIRUMIRA, Edward K.	Director, Stellenbosch Institute for Advanced Study/Professor Extraordinary, Department of Sociology and Social Anthropology, Stellenbosch University, Stellenbosch, South Africa		

Senior Advisor・Emeritus Professor・Honorary Fellow

TACHIMOTO Narifumi	Senior Advisor, Emeritus Professor	NAKANO Takanori	Emeritus Professor
YASUNARI Tetsuzo	Senior Advisor, Emeritus Professor	NAKASHIZUKA Tohru	Emeritus Professor
ABE Ken-ichi	Emeritus Professor	NAKAWO Masayoshi	Emeritus Professor
AKIMICHI Tomoya	Emeritus Professor	OSADA Toshiki	Emeritus Professor
FUKUSHIMA Yoshihiro	Emeritus Professor	SATO Tetsu	Emeritus Professor
HIDAKA Toshitaka	Emeritus Professor (deceased)	SATO Yo-Ichiro	Emeritus Professor
KADA Ryohei	Emeritus Professor	TANIGUCHI Makoto	Emeritus Professor
KAWABATA Zen'ichiro	Emeritus Professor	WADA Eitaro	Emeritus Professor
KUBOTA Jumpei	Emeritus Professor (deceased)	CHABAY, Ilan	Honorary Fellow
MALLEE, Hein	Emeritus Professor	SAIJO Tatsuyoshi	Honorary Fellow
MOJI Kazuhiko	Emeritus Professor	SUGIHARA Kaoru	Honorary Fellow
NAKANISHI Masami	Emeritus Professor	VAN DER LEEUW, Sander Ernst	Honorary Fellow

RIHN Staff *As of April 1st, 2025

Director-General

YAMAGIWA Juichi	Global Studies for Humanity and Nature, Social Ecology, Human Evolution, Primatology, Anthropology
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Deputy Director-General・Professor

ASARI Misuzu	Environmental Engineering, Education for Sustainable Development, Waste management and material cycles	Deputy Director-General (Research), Director of Research and Education Department, Director of Program Research Department, Head of Education Division Fundamental Research Department, Head of Green Knowledge Center
TAYASU Ichiro	Isotope Ecology, Environmental Isotope Study	Deputy Director-General (Planning and Coordination), Director of Fundamental Research Department, Head of Laboratory and Analysis Division Fundamental Research Department, Head of Institutional Research Unit

Professor

DWYER, Janet	Policy analysis, Agri-rural economics, Sustainable development, Participatory action research	Research and Education Department, Program Research Department (SATOCONN Project)
FUKAZAWA Keiichiro	High-performance computing, Numerical simulation, Solar-Terrestrial Environment, IoT	Research and Education Department, Fundamental Research Department (Head of Information and Planning Division)
HAYASHI Kentaro	Biogeochemistry, Soil science	Research and Education Department, Program Research Department (Sustai-N-able (SusN) Project)
KONDO Yasuhisa	Archaeological geography, Environment and societies, Science of team science	Research and Education Department, Fundamental Research Department (Education Division)
NILES, Daniel Ely	Geography	Research and Education Department, Fundamental Research Department (Head of Knowledge Networks Division)
OYAMA Syuichi	Geography, Land restoration study, Peace building study, African area study	Research and Education Department, Program Research Department (Organic Material Circulation Project)

Specially Appointed Professor

MATSUDA Motoji	Cultural anthropology, Sociology	Research and Education Department, Program Research Department (Program Director of Global Environmental Culture Program)
SHOBAYASHI Mikitaro	Agriculture and agri-environmental policies, Water resources policies, Rural development, Agricultural economics	Research and Education Department, Program Research Department (Program Director of Combining Knowledge for a Fundamental Innovation of Land Use Program)
TANIGUCHI Makoto	Hydrology	Research and Education Department, Program Research Department (Program Director of Co-creation of the Earth-human System Program, Strategic Program)
YOSHIKAWA Narumi	Agricultural economics	Fundamental Research Department (Head of Uehiro Research Center for Japan Environmental Studies)

Associate Professor

ISHII Reiichiro	Theoretical ecology	Research and Education Department, Fundamental Research Department (Information and Planning Division)
OKADA Saeko	Public relations, Science communication	Research and Education Department, Head of Public Relations Unit
HONGO Shun	Conservation Science, Wildlife management, Primatology	Research and Education Department, Program Research Department (Fashloks Project)
SHIN Ki-Cheol	Petrology, Geochemistry, Isotope geology	Research and Education Department, Fundamental Research Department (Laboratory and Analysis Division)
YASUMOTO Jun	Hydrology, Agricultural Engineering	Research and Education Department, Program Research Department (KINKAGE Project)
WATANABE Tsuyoshi	Environmental earth science, Coral reef environmental earth sciences	Research and Education Department, Program Research Department (SceNE Project)
WONG, Grace	Forest and natural resource economics, Development studies	Research and Education Department, Program Research Department (FairFrontiers Project)

Specially Appointed Associate Professor

AKIYAMA Tomohiro	Integral studies	Fundamental Research Department (Uehiro Research Center for Japan Environmental Studies)
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Specially Appointed Assistant Professor

ONISHI Yuji	Biogeochemistry	Research and Education Department, Fundamental Research Department (ORNHIA Project, NIHU)
SAWAZAKI Kenichi	Aesthetic practices	Research and Education Department, Fundamental Research Department (Liberal Arts Communicator, NIHU)

Research Fellow

HASEGAWA Emi	Ecology	Fundamental Research Department (Laboratory and Analysis Division)
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Senior Researcher

Ei	Ecology and Environment; Area Studies	Program Research Department (SATOCONN Project)
SIDIBE, Alimata	Atmospheric chemistry	Program Research Department (FairFrontiers Project)
YABUSAKI Shiho	Isotope hydrology, Groundwater hydrology	Fundamental Research Department (Laboratory and Analysis Division)
YOSHIMIZU Chikage	Biogeochemistry	Fundamental Research Department (Laboratory and Analysis Division)

Researcher

AOIKE Utako	Ecological anthropology, Area studies	Program Research Department (Organic Material Circulation Project)
ARAI Hirotsugu	Isotope ecology	Program Research Department (Sustain-N-able (SusN) Project)
HASEGAWA Masaru	Community Ecology, Carrion Ecology	Fundamental Research Department (Laboratory and Analysis Division)
HASHIZUME Akane	Community Ecology, Carrion Ecology	Program Research Department (Fashlocks Project)
LEONG, Chris	Hydrology	Program Research Department (LINKAGE Project)
METARAGAKUSUMA, Andi Patiware	Rural development	Program Research Department (FairFrontiers Project)
NODA Kentaro	Area studies, Ecological anthropology	Program Research Department (Organic Material Circulation Project)
SAIKI Makoto	Material cycle, Water environment	Program Research Department (Sustain-N-able (SusN) Project)
TOMOJIRI Daiki	Ecology, Area studies	Program Research Department (LINKAGE Project)
WAI PHYOE MAUNG	Forestry, Area studies	Program Research Department (FairFrontiers Project)
MURATA Takeshi	Geo-Informatics, Well-being Informatics	Fundamental Research Department (Information and Planning Division)

Visiting Professor

BABA Kenshi	MIZUNO Kosuke
HABU Junko	NAKAGAWA Yoshinori
HARA Takeshi	NAKATSUKA Takeshi
HASEGAWA Yuko	NIIKAWA Tatsuro
HAYASHI Hiroaki	PATRA, Prabir
HAYASHIDA Sachiko	SAIJO Tatsuyoshi
ITO Takeshi	SAKAI Shoko
IZDEBSKI, Adam	SAKAKIBARA Masayuki
KADA Yukiko	SHINJO Ryuichi
KANIE Norichika	SUEMATSU Hiroyuki
KASUGA Fumiko	SUGIHARA Kaoru
KONO Yasuyuki	TERADA Masahiro
KOZAN Osamu	UEHARA Mayuko
KUDO Taiko	Uwe Latacz-Lohmann
KUMAZAWA Terukazu	YAMANAKA Manabu
KUSAGO Takayoshi	YAMAUCHI Taro
MALLEE, Hein	YOSHIDA Takehito
MATSUMI Yutaka	ZHANG Jing

Visiting Associate Professor

AOKI Eri
IUE Minako
KANEMOTO Keiichiro
KIHARA Hirotaka
MASUHARA Naoki
MCGREEVY, Steven Robert
MOTOHASHI Jin
NAKADAI Ryosuke
ONISHI Yuko
OTSU Eri
SHIMIZU Takao

Visiting Assistant Professor

ICHIHARA Masako
NGUYEN, Tien Hoang

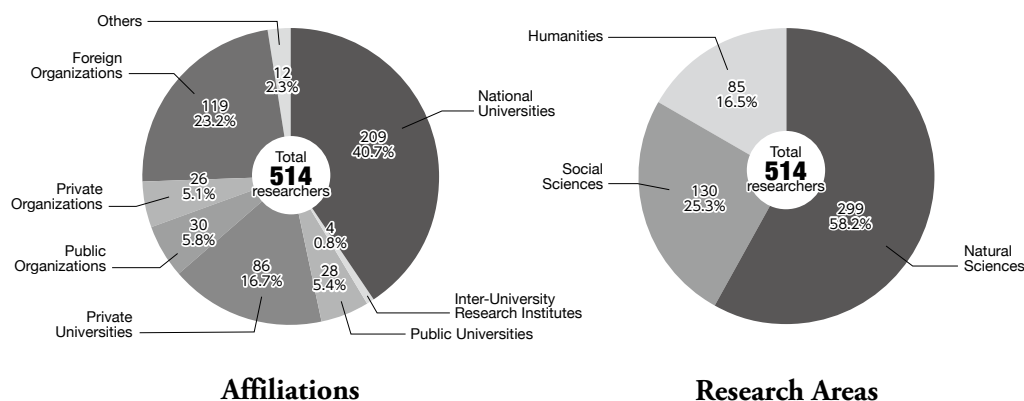
Budget (FY 2025)

	Amount (Yen in thousands)
Income	1,426,529
Subsidy for Operation	1,412,023
Self Revenue	14,506

External Sources of Funding (FY 2024)

Category	Amount (Yen in thousands)
Fund for Promotion of Academic and Industrial Collaboration	79,632
Grants-in-Aids for Scientific Research (KAKENHI)	42,635
Donations for Research	112,695

Collaborative Researchers *As of March 31st, 2025



Domestic Collaboration *As of April 1st, 2025

RIHN has concluded 28 agreements on academic exchanges with research institutes and administrative agencies nationwide, and is working to promote cross-organizational academic research and to enhance and develop mutual research and education.

Universities and Research Institutions

1. Graduate School of Environmental Studies, Nagoya University
2. Doshisha University
3. Nagasaki University
4. Kyoto Sangyo University
5. Tottori University of Environmental Studies
6. Kyoto University
7. Center for Environmental Remote Sensing, Chiba University
8. Institute of Nature and Environmental Technology, Kanazawa University
9. Graduate School of Life Sciences, Tohoku University
10. Kyoto Seika University
11. University of the Ryukyus
12. Hokkaido University
13. National Agriculture and Food Research Organization

Municipal Governments and Other Agencies

1. Saijo City (Ehime Prefecture)
2. Kyoto Municipal Science Center for Youth
3. Food and Agricultural Materials Inspection Center
4. Ono City (Fukui Prefecture)
5. Kameoka City (Kyoto Prefecture)
6. Kyoto Prefectural Rakuhoku Senior High School
7. Miyazaki Prefecture
8. Kyoto City, ICLEI Japan, Kyoto Environmental Activities Association
9. Kyoto Institute, Library and Archives
10. Oshino Village (Yamanashi Prefecture)
11. 12. Kyoto Prefecture, Kyoto City (2 agreements)
13. Asia Center for Air Pollution Research, Japan Environmental Sanitation Center
14. Kyoto Prefectural Board of Education
15. Kyoto City Board of Education

International Collaboration *As of April 1st, 2025

RIHN has actively concluded 25 memorandums of understanding with overseas research institutes, universities, etc., promoting joint research, sharing research materials, and encouraging personal interaction. In addition, in order to build closer ties with overseas researchers, we have invited many prominent researchers from various countries as invited foreign researchers.

Austria	-International Institute for Applied Systems Analysis	Laos	-Lao Tropical and Public Health Institute, Ministry of Health
Cameroon	-Green Development Advocates		-The Faculty of Forest Science, National University of Laos
China	-East China Normal University	Malaysia	-PACOS Trust
	-Hainan Provincial Center for Disease Control and Prevention / Hainan Provincial Preventive Medicine Association		-Universiti Malaysia Sabah
			-Universiti Malaysia Sarawak
Democratic Republic of the Congo	-Center for Intercultural and Interdisciplinary Research for Sustainable Development in Southern and Central Africa	Netherlands	-Copernicus Institute of Sustainable Development, Utrecht University
	-Forgotten Parks	Republic of Korea	-Institution for Marine and Island Cultures, Mokpo National University
India	-Indian Institute of Technology - Delhi	Sweden	-Stockholm Resilience Centre at Stockholm University
Indonesia	-Forestry Faculty of Universitas Hasanuddin	Republic of Uganda	-Kyambogo University
	-Halu Oleo University	Republic of Zambia	-University of Zambia
	-Institut Teknokigi Dan Bisnis Muhammadiyah Wakatobi	Sultanate of Oman	-Sultan Qaboos University
	-University Riau	United Kingdom	-University of Gloucestershire
	-Wakatobi Regency	United States of America	-University of California, Berkeley

A Brief History of RIHN

- 1993 – Prime minister’s advisory panel on the Global Environment in 21st Century launched
- 1995 – “On the Promotion of Global Environmental Studies” published by the Science Council of Japan
- 1997 – Report “On the core research institute for Global Environmental Studies” published by MEXT (Ministry of Education, Culture, Sports, Science and Technology)
- 2001 – RIHN Established on the Kyoto University campus
– HIDAKA Toshitaka, Director-General
- 2002 – RIHN relocated to the former Kasuga Primary School
– The 1st RIHN Forum
- 2004 – RIHN becomes a member of the National Institutes for the Humanities
– The 1st RIHN Public Seminar
- 2005 – The 1st RIHN Area Seminar
- 2006 – RIHN relocates to current facilities in northern Kyoto
– The 1st RIHN International Symposium
- 2007 – TACHIMOTO Narifumi appointed as the second Director-General
– The Center for Coordination, Promotion and Communication established
– First research projects concluded
- 2008 – The 1st Collaborative Symposium with the International Research Center for Japanese Studies
- 2009 – The Earth Forum Kyoto and Earth Hall of Fame Kyoto Award established
- 2011 – RIHN 10 year anniversary and publication
- 2013 – YASUNARI Tetsuzo appointed as the third Director-General
– The Center for Coordination, Promotion and Communication reorganized into the Center for Research Development and the Center for Research Promotion
- 2014 – Selected as Regional Center for Future Earth in Asia
- 2016 – The Center for Research Development and the Center for Research Promotion reorganized into RIHN Center
- 2021 – YAMAGIWA Juichi appointed as the fourth Director-General
– RIHN 20 year anniversary and symposium
– Kyoto Climate Change Adaptation Center established
– Joined the Consortium that hosts the Future Earth Global Hub Japan
- 2022 – The Strategic Planning and Management Department established
– RIHN logo redesigned
- 2023 – Global Environmental Studies Program, the Graduate University for Advanced Studies, SOKENDAI established
- 2024 – The Research and Education Department established
– RIHN Center reorganized into the Fundamental Research Department, the Research Department reorganized into the Program Research Department
– Uehiro Research Center for Japan Environmental Studies established
- 2025 – Green Knowledge Center established
– Future Earth Center established

Facilities

Research rooms on the RIHN campus are designed to provide a sense of openness. The design concept is to allow implemented projects to be loosely interconnected as they occur in one large curved space 150 meters in length. The facilities help external researchers as well as RIHN research staff to meet one another, since they are designed with the maximization of shared use in mind. At the center of the main building, a library and computer room are located for the convenience of many users, and three common rooms are provided for casual discussions. On the basement floor, a cluster of fully functional laboratories has been designed with emphasis on convenience for shared use, as with the research rooms.

The separate RIHN House is a guesthouse. The assembly hall and a dining lounge located to the left of the house entrance serve as meeting spaces for the RIHN staff as well as for guests.

Appropriately for an institution researching the global environment, RIHN is housed in a tile-roofed building suited to the Kyoto landscape, where as many as possible of the trees already on the site have been retained. Lighting and air-conditioning also employ the latest designs to minimize the building's impact on the environment. The design has won acclaim, receiving awards from the Illumination Engineering Institute of Japan, the Japan Institute of Architects, the Green Building Award from MIPIM Asia, and the Architectural Institute of Japan.

Outline

Site area	31,453m ²
Building area	6,266m ² (Main building : 5,626m ² , RIHN house : 640m ²)
Total floor area	12,887m ² (Main building : 11,927m ² , RIHN house : 960m ²)
Structure	Main building : RC, partly S structure, RIHN house : RC structure
Number of floors	Main building : 1 basement and 2 floors above ground, RIHN house : 1 basement and 2 floors above ground

2 F

Main Entrance Hall
Exhibition Hall
Lecture Hall
Administration
Seminar Rooms
Dining Hall

1 F

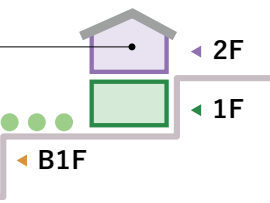
Project Rooms
Fundamental Research Department
Media Center
Library

Basement

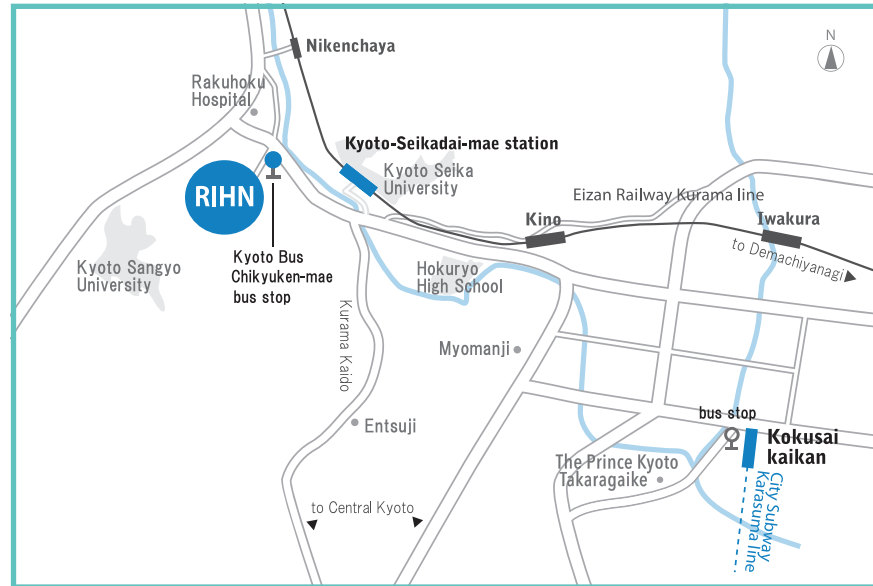
Laboratories
Book Repository
Field Research Equipment and Facilities

2F

1F



Research Institute for Humanity and Nature National Institutes for the Humanities



By City Subway

From Kyoto Station, take the Karasuma Line to Kokusai kaikan Station (the last station), and transfer to Kyoto Bus.

By Kyoto Bus

From Kokusai kaikan Station, take bus No. 40, 50, 52 or 54 to Chikyuen-mae. RIHN is at the base of the hill on your left.

By Eizan Railway

From Demachiyana Station in Kyoto City, take the Kurama Line. Get off at Kyoto-Seikadai-mae Station. RIHN is a 10-minute walk from the station.





Research Institute for
Humanity and Nature
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