

RIHN 2026-2027

Prospectus





Front Cover Photo by Marlon del Aguila Guerrero
"Bright and shine smile" (Cameroon)

Research Institute for Humanity and Nature

Prospectus 2026-2027

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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. Furthermore, military actions involving the United States, Israel, and Iran in 2026 have underscored the fragility of the current geopolitical landscape and added to global uncertainty. 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-five years, RIHN has conducted forty-six 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

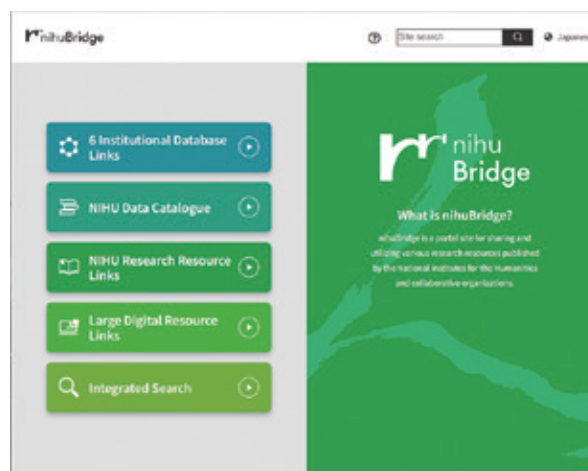
Co-creation Outreach

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.

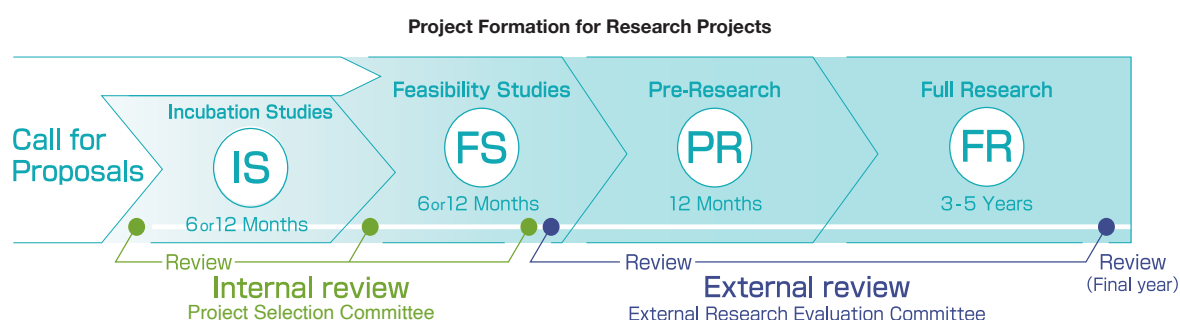
3. The perspective to develop approaches and ideas for solving global environmental problems and suggest mechanisms to realize the solutions in collaboration with various actors in society.

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 originally comprised various stage of research projects ranging from embryonic stages, but, starting in 2025, the three full-fledged research projects have been fully established and are vigorously expanding their activities. 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) 1st Year Organic Material Circulation Project and the SceNE 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).

Research Associates at RIHN

KARATSU Fukiko Research Associate

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 25 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



Outline of the project

The world 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 style)” 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.

| Noteworthy items

The first was to use “RIHN compost (waterless dry compost)” technology to make compost from kitchen waste from hotel



Photo 3 Fig fruits produced using RIHN waterless dry compost

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, we introduced the concept, technology and recipe for “RIHN compost (waterless dry compost style)” to elementary schools in Kyoto Prefecture, and provided classes so as to give opportunities to consider this possible countermeasure to the environmental problem. Third, in Niger, West Africa, the government has officially recognized our project initiatives as a formal greening method, and our social implementation is steadily progressing.

In Djibouti, a desert country, we use treated wastewater for dryland agriculture. The project site is used for training by the Ministries of Agriculture of the IGAD countries in East Africa.

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 / Graduate School of Asian and African Area Studies / Center for African Area Studies, Kyoto University

OYAMA Shuichi is Professor at RIHN and Center for African Area Studies, Kyoto University. His specialty is geography, land restoration, peace building research and African Area Studies. He conducted multi-disciplinary research based on geography in Zambia, Uganda, Niger, Ghana and Djibouti. Also, he is tackling for creating organic material circulation system between urban and rural areas in Sub-Saharan Africa and 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 Lifeness*. 2022).

Sub Leaders

SHIOYA Akiyo

USHIKU Haruka

HARA Masaya

Kyoto University

Hokkai Gakuen University

Kobe University

Researchers and Research Associates at RIHN

AOIKE Utako

Researcher

NODA Kentaro

Researcher

NAKADE Michiko

Research Associate

Main Members

NAKANO Tomoko

Chuo University

SAKAMOTO Takuto

University of Tokyo

TSUCHIYA Yuichiro

Kyoto University of Education

SHIMADA Sawahiko

Tokyo University of Agriculture

KOSAKA Yasuyuki

Kyoto University

HARADA Hidenori

Kyoto University

YABE Naoto

Tokyo Metropolitan University

Main Field Sites

Japan (including Kyoto and other areas) and sub-Saharan Africa (Niger, Uganda, Zambia, Ghana, and Djibouti)

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



Outline of the project

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.

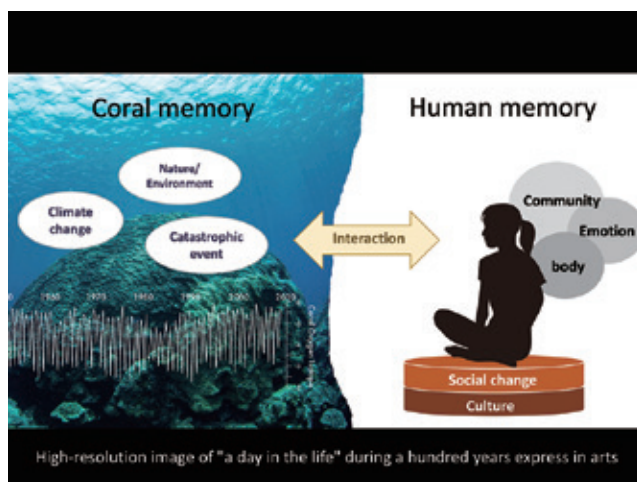


Figure 1 An example of the high-resolution images that we aim to achieve in this research, by transforming coral and human memories into art.

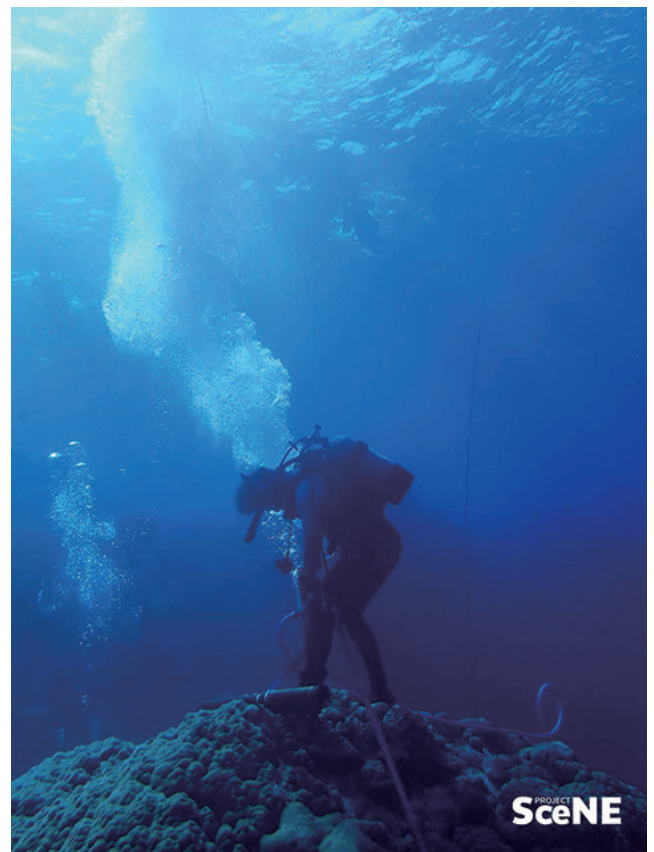


Photo 1 Underwater drilling of reef coral cores. Geochemical analysis of columnar samples can reconstruct hundreds of years of past marine environments on a weekly to monthly resolution.

Results

2021 2022 2023 2024 2025 2026 2027 2028
FS - FS - FS/PR - FR1 - FR2 - **FR3** - FR4 - FR5

| 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

This year, we promoted research that explores the relationships among nature, culture, and society based on coral reef systems. We established an analytical framework for stable isotope ratio mass spectrometry and conducted drilling surveys of Holocene fossil corals from Kikaijima, followed by measurements of oxygen and carbon isotope ratios. We also carried out the sailing voyage “*The Ark of Coral Reefs*,” through which marine observations, underwater acoustic surveys, and cultural exchanges fostered collaboration among researchers, artists, and residents. In addition, research outcomes were shared through various platforms, including a collaborative exhibition with traditional crafts in Kyoto, a theatrical performance at the Toyooka Theater Festival, SceNERIUM dome screenings, and community meetings and festivals, enabling a multifaceted understanding of the relationships between coral reefs and human society.

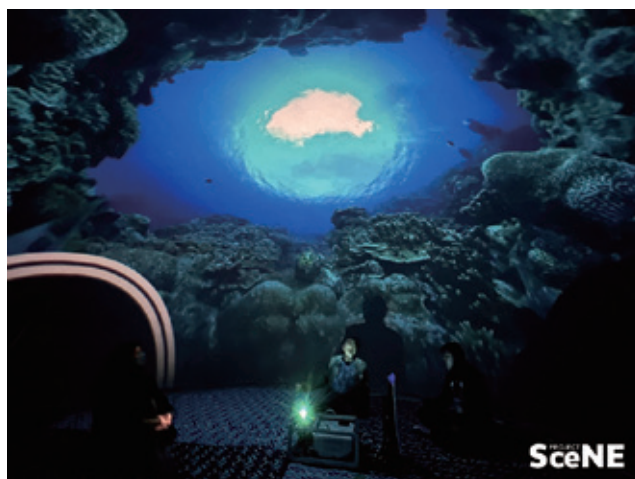


Photo 3 SceNERIUM –Dome for experience of “Umwelt”–

Project Leader

WATANABE Tsuyoshi

Associate Professor, RIHN / Faculty of Science, 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 fieldwork inside and outside of Japan.

Sub Leader

YAMAZAKI Atsuko

Nagoya University

Main Members

GOTO Akira

KIKAI Institute for Coral Reef Sciences

KATO Hirofumi

Hokkaido University

HIRATA Oriza

Professional College of Arts and Tourism

YAMANO Hiroya

The University of Tokyo

NAKAMURA Takashi

Science Tokyo

TANAKA Kentaro

NISHIMURA Yuya

ITO Takeshi

YODA Mami

KATO Katsumi

FUJIEDA Mamoru

HASEGAWA Yuko

YAMASHITA Megumi

MIYAZAKI Rena

SHIGESADA Nako

TANAKA Moena

MIYAJI Kohei

Tokyo City University

Osaka University

Osaka University

Sagami Women's University

KIKAI Institute for Coral Reef Sciences

KIKAI Institute for Coral Reef Sciences

Kyoto University

Artist

Artist

RIHN

RIHN

RIHN

Main Field Sites

Kikai Island (Kikaijima), Amami Islands

Fashloks Project

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

Tropical rainforests worldwide are facing declines in wildlife populations due to excessive hunting. However, the implementation of strict conservation policies is also threatening the survival of local hunting cultures. To resolve this wild meat crisis, cooperation between local knowledge and science—through equal dialogue between local communities and conservation organisations—is essential. We aim to establish fair and sustainable hunting management through co-production research by local hunters and researchers.

Project Leader
HONGO Shun



Outline of the project

Wildlife in tropical rainforests supports the rich biodiversity of the forest through food chains and seed dispersal. For forest-living people, on the other hand, wildlife hunting provides a livelihood offering protein and income, while also being a source of cultural diversity that nurtures locally specific social norms and worldviews. However, over recent decades, hunting pressure in tropical forest regions has increased rapidly, leading to reports of significant declines in wildlife populations. This issue, termed the wild meat crisis, has drawn international attention, prompting governments to establish protected areas and impose strict hunting restrictions. Consequently, even subsistence hunting by local communities has been curtailed, creating friction between conservation agencies and residents.

Furthermore, this issue is rooted in a disagreement over the nature of knowledge between researchers and conservation authorities grounded in scientific conservation ecology, and local hunters and communities who value experience and local knowledge. To reconcile biodiversity conservation with the sustenance of hunting cultures and to steer the wild meat crisis towards tangible solutions, co-production research grounded in equal dialogue between scientific and local knowledge experts is indispensable. We will propose wildlife monitoring methods grounded in the knowledge of both groups for tropical rainforests in the Congo Basin, the Amazon, and Southeast Asia. Moreover, we aim to establish hunting management systems in two core sites (Cameroon and Colombia) that actively incorporate subsistence hunting and are perceived as fair and sustainable by all diverse local actors.



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



Figure 1 Subsistence hunting-based wildlife monitoring. Illustration by IZUMORI Yo

| What we know so far

Our research activities have revealed site-specific differences in the relationships between scientific conservation and local culture, even within tropical rainforest regions. The Cameroon and Gabon sites prioritise conservation over culture; the Colombia and the Democratic Republic of the Congo sites place greater emphasis on culture; 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 co-production research under different conditions.



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

| Noteworthy items

In FY2025, the inaugural year of the Full Research, we reorganised numerous previously proposed research topics into six activities, restructuring the project planning framework. Among the six categories, the members, primarily young researchers and PhD students, commenced fieldwork for two investigative activities—Anthropological Investigations and Ecological Investigations. In Cameroon, for instance, research commenced on topics such as “Collaborative practice with local communities regarding knowledge of traditional plant traps”, “The food culture of wild meat”, and “The impact of hunting residues (discarded organs and decaying carcasses) on the detritus food chain and soil nutrients”. In Colombia, we conducted investigations on “The impact of tourism on local communities’ values regarding wildlife” and “Estimating the diversity and population size of hunted mammals”. Moving forward, we plan to develop these into more co-produced approaches. Furthermore, we have signed cooperation agreements with partner research institutions in Sabah, Borneo (Universiti Malaysia Sabah) and Gabon (National Centre for Scientific and Technological Research), and have also signed a cooperation agreement with the Indigenous organisation at the Colombian 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 of his research, he combines scientific methods, including camera trapping, with the local knowledge of skilled hunters to develop wildlife management models for tropical rainforests.

Sub Leader

TOKUYAMA Nahoko Chuo University

Researchers and Research Associates at RIHN

MURAMATSU Daisuke Senior Researcher
HASHIZUME Akane Researcher
KAMGAING TOWA, Olivier William Researcher

MONSALVE CUARTAS, Ana Maria Researcher
HANZAWA Maho Researcher
SEKINO Ayako Researcher
HIROSHIMA Yukiko Research Associate

Main Members

YASUOKA Hirokazu Kyoto University
VAN Vliet, Nathalie Food and Agriculture Organisation of the United Nations
NAKABAYASHI Miyabi Hiroshima University
MATSUURA Naoki Sugiyama Jogakuen University
NAKASHIMA Yoshihiro Nihon University
YOKOYAMA Takumasa The University of Osaka

Main Field Sites

Cameroon, Colombia, Malaysia (Borneo), Gabon, Democratic Republic of Congo

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 FY2026, among the two projects launched under this program, the project "Satoyama Reconnections: Engaging Communities in Resilient, Nature- and Climate-positive Land Use Futures" will enter its second year of full research, while the project "Pluriversal Land Use: Exploring Institutions, Values and Worldviews" will begin its first year of full research activities.

With both projects now underway, we consider it important to create an environment in which the projects can stimulate one another while enhancing their complementarity as they progress under the program. 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. As one such initiative, in March 2026 we jointly organized an international seminar with both projects entitled "Re-thinking Scaling Up: Institutions, Governance, and Place-Based Land Use", which aimed to discuss what is required to mainstream diverse initiatives for land-use innovation. Similar initiatives will be continued in FY2026. Furthermore, in order to complement the two projects from a macro-level perspective, the program will also pilot the measurement of Sustainable Productivity Growth in land use, in collaboration with the joint research team established in FY2025.

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

SATOCNN Project	DWYER, Janet	P22
Pluriverse Project	TAMURA Norie	P24



Photo by Yuzuru Wakabayashi

Program Director

SHOBAYASHI Mikitaro
Specially Appointed Professor, RIHN

Dr. Shobayashi 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. Since 2007, he has been a professor at Gakushuin Women's College, in the Faculty of Intercultural Studies. Since 2017, he has been 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."

Research Associates at RIHN

KATSUYAMA Maki

Research Associate

SATOCONN 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. SATOCONN 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 in partnership with local actors, 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.

SATOCONN deploys a Living Labs framework, to engage research, practice and policy in planning and undertaking action for positive change. Insight from natural and social science, heritage 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 method enabling experimentation and real-world change alongside research and

public engagement. A four-stage process: visioning; experimenting; learning 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 are partnering to mobilise living labs that will 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 co-develop our labs with local stakeholders including farmers and communities, institutional and policy actors, to seek impact at local, regional/prefectural and national levels. SATOCONN will also train and empower a cohort of young European and Japanese researchers to apply and develop transdisciplinary methods to benefit people and planet, working as respectful partners with communities and policymakers.

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

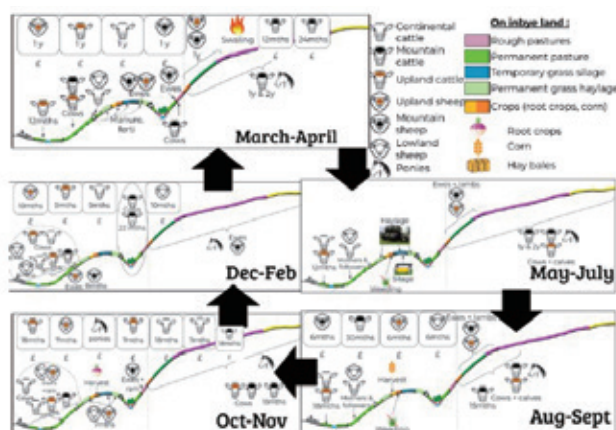


Figure 1 A diagram of farming systems evolution in Dartmoor – from the agrarian diagnosis method that Satoconn is adapting for its SILA. Illustration by DUVERNE, Lucie and PAGES, Paul (2023)

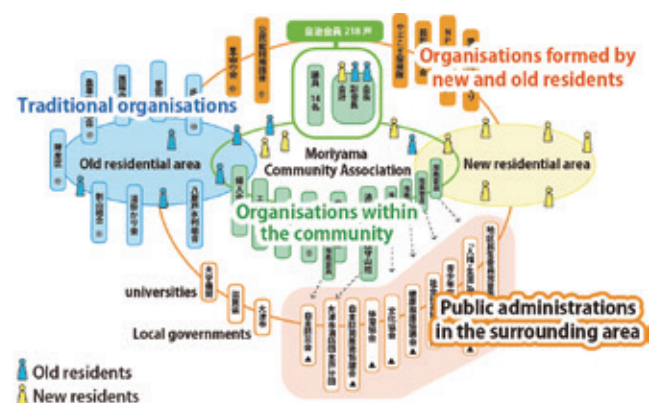


Figure 2 Stakeholder mapping in Morioka – illustrating the groups and associations in one case study community, and their interlinkages. (Created by FUKAMACHI Katsue and OHARA Ayumi, published in Omi Studies, No. 15, Omi Multicultural Institute, Seian University of Art and Design.)



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



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

Results

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

What we know so far

In our first research year, the research teams were established and training provided for early-career researchers in Europe and Japan. In-depth discussion and guidance were developed to support our Satoyama Integrated Landscape Assessment (SILA) method and share skills and experience in facilitating living labs. Teams are being deployed to undertake the SILA in each location, building upon the core method of agrarian diagnosis, adapted to respond to our multifunctional mix of land uses. We are simultaneously testing, reflecting upon and refining the approach as we progress in partnership with local actors, mobilising indigenous and expert knowledge.

A full team meeting was held in Kyoto in September 2025, enabling valuable learning and exchange between cases. Our web-site launched in summer 2025 and we have established our International Advisory Board of experts in policy and practice, as well as building a SATOCONN dissemination, communication and exploitation plan and developing initial theories of change, identifying potential pathways to impact. The teams in each location have established good connections with their communities and begun to select and plan living lab actions together, supported by agrarian diagnosis work, stakeholder mapping and other activities.

We are refining emerging results of our six SILA, and reflecting on learnings from 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. We already identify a common portfolio of constraints and drivers of change weakening satoyama cultures, as well as common potential responses, but combined in different ways to suit the unique situation in each case, supporting positive ways forward.

Demographic decline, inadequate governance and increasing land-use conflict are linked to low levels of understanding of human-nature interlinkages and their value for well-being, among many in society. Nevertheless, in our cases we identify both older and young people who have an appreciation of these fundamental connections. Entrepreneurial actors and groups are important, as well as communities who continue to invest time and effort maintaining cultural and social practices and knowledge to share between longstanding and newly-arriving households. Good relations between researchers, policy makers and practitioners have been established, enabling early discussion and examination of the motivations and capacities that must underpin our living labs.

We have also identified gaps in knowledge and/or the gathering and interrogation of information that is important for the project. More accessible ecological condition and climate projection knowledge must be collated to enable effective future planning, as well as policy and social assessments to help us to establish the potential 'room for manoeuvre' and scope for change, in each case.

We have also identified a rich range of existing practice and custom associated with Satoyama, in all our cases, and plan to mobilize a variety of endogenous arts methods within the project, to deepen and enhance impact at all levels.

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 in applied rural research, her work focuses 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 SATOCONN, also promoting rural resilience in England's hill and upland areas, co-Directing the National Innovation Centre for Rural Enterprise (www.nicre.co.uk), and evaluating the social implications of EU farm policies. She was awarded an OBE in June 2022 for 'services to rural research'.

Sub Leader

MANSFIELD, Lois

University of Gloucestershire

Researchers and Research Associates at RIHN

Ei

Researcher

OSAKI Risa

Research Associate

Main Members

FUKAMACHI Katsue

Kyoto University

KOBAYASHI, Mai

ASAI, Masayasu

KAWAHIGASHI, Natsuko

DEVienne, Sophie

BOUIHED, Maryam

SANDSTRÖM, Camilla

KÖNIG, Fabio

HALLER, Tobias

LOMBA, Angela

PINA, Ana Rita

TOYODA Mitsuyo

BLACK, Jasmine

McCRACKEN, Davy

SHORT, Chris

BEDINI, Gaia

NOGUEIRA, Joana

NGUYEN, Bich Ngoc

Kyoto University

Kyoto University

Kyoto University

AgroParisTech

AgroParisTech

Umeå University

Umeå University

University of Bern

University of Porto

University of Porto

Niigata University

Niigata University

Scotland's Rural College

University of Gloucestershire

University of Gloucestershire

Instituto Politécnico de Viana do Castelo

RIHN

Main Field Sites

Satoyama and other landscapes of high natural value in the United Kingdom, Europe (Portugal and Sweden), Switzerland, and Japan



<https://satoconn.com/en/>

Pluriverse Project

Pluriversal Land Use: Exploring Institutions, Values and Worldviews

While economic efficiency has marginalized nature-based local practices, this project strives for a “Pluriverse” where diverse values thrive in land and forest use. We integrate relational values and environmental humanities into local actions, refining these theories through practical feedback. Through diverse field studies globally and across Japan, we are building the essential foundations for land use to achieve a nature-positive future.

Project Leader

TAMURA Norie



Outline of the project

1. From a One-World World to Pluriversal Land Use

Today, land use is often shaped by a single dominant paradigm that prioritizes economic efficiency above all else. Nature is primarily treated as a resource, while other important values—such as culture, social relations, and care for the environment—are often overlooked. As a result, local practices that live in balance with nature have frequently been regarded as marginal or inefficient and pushed to the periphery of society.

This project challenges that approach by promoting a Pluriversal Land Use—a world in which diverse values and ways of using land can coexist. Focusing on farmland and forests, the project aims to bring these overlooked practices into the mainstream and demonstrate that they offer meaningful alternatives for a sustainable future (Photo 1 · 2).



Photo 1: An artificial nesting tower for the Oriental white stork in the rice fields of Toyooka City, Hyogo Prefecture.

2. Supporting Practice through Relational Values

A key idea guiding this project is Relational Values. This concept highlights the interdependent relationships between humans and nature, emphasizing care, responsibility, and long-term relationships rather than short-term gains.

The project uses research from fields such as environmental humanities and biodiversity studies to articulate the significance of local practices. Academic knowledge is mobilized as practical tools that support people working on the ground and helps secure social recognition of their efforts. By linking theory with everyday practice, the project moves beyond economic efficiency as the sole measure of value and instead highlights social, cultural, and ecological importance.

3. A Transdisciplinary Framework Linking Field Sites in Japan and Abroad

The project brings together six working groups, organized through a shared platform that encourages cooperation across different fields and sectors (Figure 1). Research activities take place in several regions of Japan, including Kyoto, Hyogo, Tokushima, Ehime, and Nagano. The project also examines similar efforts in other countries, contributing to the development of an international practitioner network.



Photo 2: Children skillfully making use of steep slopes and fallen trees during a forest kindergarten activity in a suburban satoyama woodland.

Through these activities, the project aims to translate the concept of Pluriversal Land Use into real social practice,

contributing to a nature-positive future in which people and nature can thrive together.

Research progress

What we know so far

Research during the PR period revealed that the modern “One-World World” paradigm of land use fails to adequately capture nature-based local practices, leading to their marginalization.

To better capture the complexity of real-world situations, the project has expanded and refined its core theoretical framework from a “multispecies” perspective to the more inclusive concept of a Pluriverse.

The research has also identified major barriers to mainstreaming these practices, including overlaps and inconsistencies among legal systems related to farmland, forests, and urban planning, as well as gaps between international policy processes—such as those of IPBES—and on-the-ground realities.

In response, the project has confirmed the effectiveness of its original approach, “Transdisciplinarity (TD) as Practice,” which places the perspectives and knowledge of practitioners at the center of research and action.

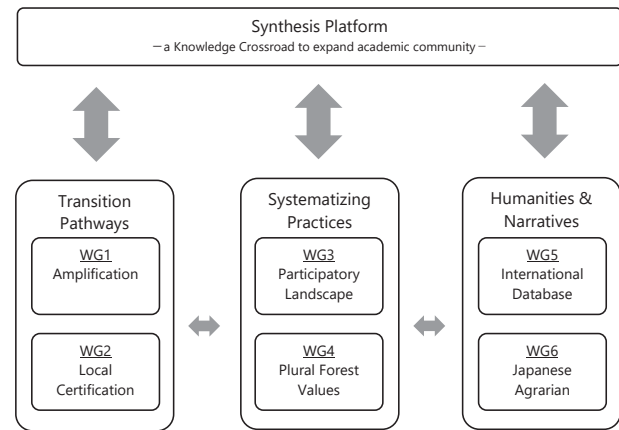


Figure 1: Project framework

New connections

As a key achievement in FY2025, the project developed a concept graphic that visually represents its core ideas (Figure 2). This graphic connects abstract theoretical concepts with real landscape data, serving as a strategic tool for clear and effective external communication.

On the organizational side, the project strengthened its structure to go beyond routine administration and function as a space for intellectual integration. An integrated platform was established to bring together expertise from three streams and six working groups, creating a “knowledge crossroads” where diverse perspectives and insights can interact and inform one another.

Academically, the project consolidated its conceptual foundation through workshops with invited experts and the publication of a special journal issue. These efforts have helped clarify and refine the project’s guiding ideas.

Together, these developments have laid a solid foundation for the full-scale launch of project activities in the coming year.



Figure 2: Concept graphic for the Pluriverse Project “A paddy landscape where all life co-exists and thrives” © AOI Landscape design

Project Leader

TAMURA Norie

Associate Professor, RIHN / The Graduate School of Project Design

Born in Nishinomiya City, Hyogo Prefecture, Japan. Completed doctoral program at the Graduate School of Agriculture, Kyoto University in 2007 and received a Ph.D. in Agricultural Science.

After approximately ten years working as a consultant in the fields of agriculture, forestry, fisheries, and rural development in the private sector, served as a Senior Researcher at the Research Institute for Humanity and Nature (FEAST / Ecohealth Project). Since October 2025, has held the current position while concurrently serving as an Associate Professor at the Graduate School of Project Design.

Specializes in regional revitalization through small-scale, locally rooted agriculture, forestry, and fisheries, with particular interest in how these practices foster the sustainable use of natural capital.

Researchers and Research Associates at RIHN

EBERL Atsuko

Research Associate

Main Members

MALLEE, Hein

OMOTO Reiko

KAMADA Mahito

MIKI Atsuro

RUPPRECHT, Christoph

NISHIKAWA Yoshiaki

Kyoto Prefectural University

Tottori University

Tokushima University

Shinshu University

Ehime University

Ryukoku University

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 FY2026, the program consists of two Pre Research (PR) Projects, 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

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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 Steering Committee member of Water-Energy-Food Nexus KAN and a Governing Council member of Future Earth. 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



https://www.chikyu.ac.jp/taniguchi.program/en/index_en.html

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



Outline of the project

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 elucidate the mechanisms for sustaining livelihoods in island communities with limited resources.

On the other hand, through behavioral science and institutional analysis, we clarify the transition and multilayered nature of the system, organization, and awareness of adaptive governance. In addition, we 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.

Results

What we know so far

In 2024, a severe bleaching event occurred in Sekisei Lagoon, Japan's largest coral reef, where 84% of coral colonies were affected. While rising seawater temperature is considered the primary driver of coral bleaching, our research has also focused on phosphorus accumulated in seabed sediments. Our studies have shown that coral bleaching and colony decline tend to occur more frequently in areas with higher phosphorus accumulation in sediments. Furthermore, experiments using juvenile corals indicate that the key factor is not simply phosphate concentration but the nutrient load, defined as the amount of phosphate entering the sea together with water flow. These findings suggest that land-derived impacts on coral reefs should be evaluated in terms of nutrient load rather than concentration alone.

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

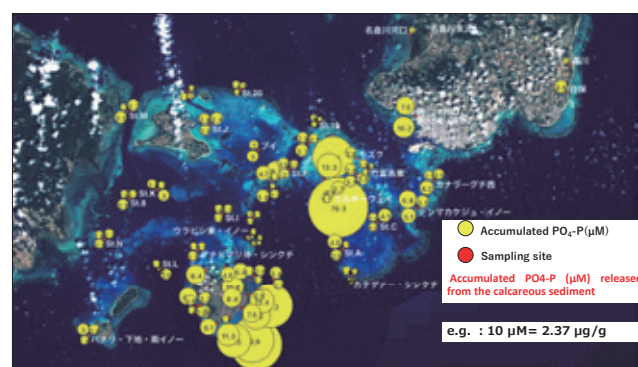


Figure 1 Mapping of accumulated nutrients (phosphate) on the seafloor in Sekisei Lagoon. Circle size corresponds to concentration.



Photo 1 Field observation in northeastern Viti Levu, Fiji

Noteworthy items

In FY2025, field surveys were conducted on Wangi-Wangi Island, Indonesia, and in Fiji (Photo 1), advancing comparative research on groundwater, seabed sediments, and coral communities. On Wangi-Wangi Island, relationships between phosphorus accumulated in seabed sediments and coral community patterns are beginning to emerge. In addition, the LINKAGE International Workshop was held on Iriomote Island, Okinawa, with researchers from partner institutions and local representatives. The workshop provided an opportunity to share the project's objectives and challenges, and to co-design methodologies for future field observations and action research (Figure 2).

On Yoron Island, we have continued the “Yunnu Historical Photo Project: Exploring Nature and Daily Life,” which aims to document the island's natural environment and local ways of life. Local residents, the Board of Education, and researchers are working together to collect and archive materials related to changes in the natural environment and everyday life, develop educational materials, and build a digital archive accessible to everyone. The theme of the 5th photo exhibition was “Meguru” (Circling) (Figure 3).

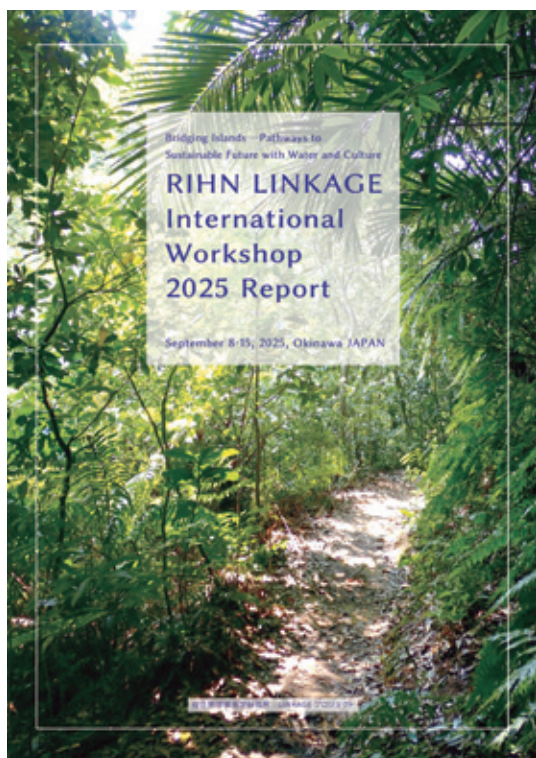


Figure 2 Multilingual Proceedings of the LINKAGE International Workshop 2025 (Japanese, Indonesian, and English)



Figure 3 Poster for an exhibition of old photographs with the theme of “Meguru” (Circling) on Yoron Island

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 and Research Associates at RIHN

TOMOJIRI Daiki

Researcher

LEONG, Chris

Researcher

KATAOKA Takae

Research Associate

Main Members

KUBO Yoshiaki

Kwansei Gakuin University

TAKAHASHI Soyo

University of the Ryukyus

RAZAFINDRABE, Bam H.N.

University of the Ryukyus

*All project members are listed at the link below.

<https://mizunowa.skr.u-ryukyu.ac.jp/investigation.html>

Main Field Sites

Japan (Ryukyu Arc), Indonesia (Wakatobi Islands), Fiji



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



Outline of the project

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.

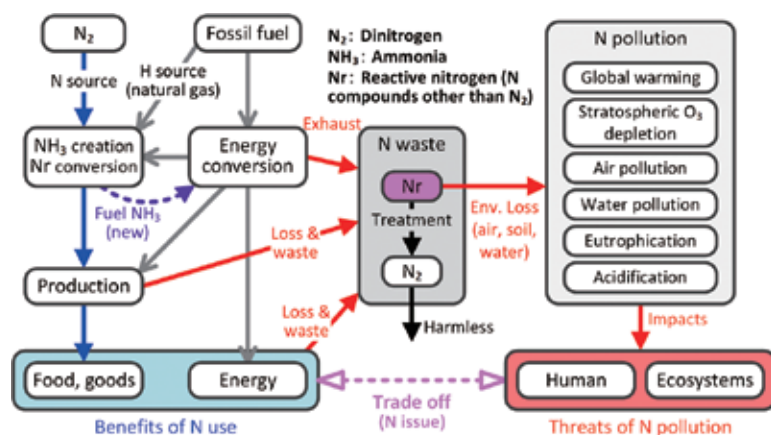


Figure 1 The nitrogen issue is a tradeoff between the benefits of nitrogen use and the dangers of nitrogen pollution.

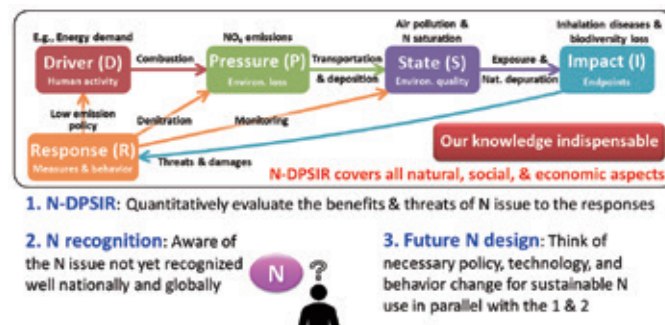


Figure 2 Targeted Breakthroughs of SusN Project



Figure 3 Illustration of the nitrogen issue
(drawing: NAKABAYASHI Madoka)



Photo 1 Activities on Miyakojima Island (April 2023–February 2026, Miyakojima City, Okinawa, Japan)

Results

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 FY2025 (FR3), we continued to analyze nitrogen cycling in both natural and human systems. On Miyako Island, for example, we conducted groundwater surveys, assessed nitrogen flows, and co-organized a local festival with community groups (Photo 1). We also carried out extensive outreach activities using leaflets (Figure 3) and videos to communicate the nitrogen issue, developed a board game to make nitrogen more relatable, and actively supported domestic and international initiatives on 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). Through the project's contribution to the formulation of Japan's Action Plan on Sustainable Nitrogen Management, released in autumn 2024 by the Ministry of the Environment in collaboration with relevant ministries, we continued to support discussions on nitrogen management at the municipal scale. Following the successful bid to host the 10th International Nitrogen Conference (N2026) in Kyoto (November 2026; <https://n2026.org/>), we have been advancing preparations under the main theme, "Sustainable Nitrogen Management for Future Generations."

Project Leader

HAYASHI Kentaro
Professor, RIHN

Kentaro Hayashi 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.

Researchers and Research Associates at RIHN

SAIKI Makoto	Researcher
ARAI Hirotsugu	Researcher
KIMURA Ayako	Research Associate
SASAKI Noriko	Research Associate

Main Members

KOBA Keisuke	Kyoto University
MATSUBAE Kazuyo	Tohoku University
KURIYAMA Koichi	Kyoto University

Main Field Sites

Japan; worldwide

ECOIP Project

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.

Project Leader

NGUYEN Tien Hoang

Associate Professor, RIHN

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 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



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



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

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 political economy analysis, 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

FUNAKI Ritsuko
OISHI Takanori

GARNETT Stephen

Chuo University

Tokyo University of Foreign
Studies

Charles Darwin University

Main Field Sites

Worldwide

WEDiDEA Project

A World Ecology of Disasters in Development in East Asia: Integrating Values into Decision-Making by Shifting Worldviews

Governing 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 peoples' changing relationship with nature. We focus on cases in Cambodia, Indonesia, Japan, Myanmar, Nepal, the Philippines, and Thailand and the regional economic, environmental and disaster governance systems that impact them.

Project Leader

ITO, Takeshi

Professor, Faculty of Liberal Arts, Sophia University

Why do this research?

The world is confronted with climatic, biophysical and socio-economic challenges that negatively impact the sustainable futures of both humanity and nature. Especially, in a rapidly changing and interlinked world, achieving sustainable development has been increasingly understood as an outcome not only of economic and social policies but also the ability to manage disaster-related risks. Economic connectivity has made increasingly clear ecological connectivities between distant places, and transformed multi-sited local nature-society relations. We seek to understand how thickening economic and ecological connectivities through global commodity chains have led to growing risks and vulnerabilities of disasters, and integrative policy responses. We view disasters as complex socio-economic phenomena that emerge at the intersection of hazard agents and human social systems. We understand disasters and development not as discrete entities; rather they are producers and products of world-making within the longue durée of capitalism.

The main objective of this research is to reduce the impact of disasters through rethinking development that would integrate multiple values into policies and governance of development, environment, and disasters through shifting knowledge systems, worldviews and values on humanity-in-nature relations. Ways of knowing—i.e., conceptualization of the world—structure political responses; shifting ways of knowing is thus central to policy change. Linear understandings of top-down, fragmented, technical responses to disasters and development reflect a set of narrow understandings of why disasters occur and how we should respond to them.



Photo 1: Bang Ban District, Ayutthaya in Thailand September 2025. Japan's investment into Thailand catalyzed wide-spread industrialization. In Ayutthaya, one of Thailand's industrialization centers, the policy of keeping industrial zones dry made the nearby Bang Ban farming community vulnerable to floods.



Photo 2: 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.

A growing literature emphasizes that values that conceive of humanity as part of nature are central to addressing the formidable climatic, biophysical and socio-economic challenges we currently face. A major report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2022), for example, engages with values—e.g., responsibility, reciprocity, and respect for nature—as well as diverse knowledge systems—e.g., situated and indigenous knowledges, which are reflected in worldviews—i.e., diverse ways that humanity conceives and interacts with nature. The IPBES typology of values of nature makes visible otherwise neglected contributions from nature and holds the potential of building common ground across different values held by various stakeholders, from which we seek to deepen a critical engagement with power and political economy that determine whose worldviews, knowledge systems, and values are included or excluded in decision-making.

Our transdisciplinary research engages in ethnographic fieldwork and political economy analysis and discourse analysis, incorporating a range of disasters, from primarily human mediated to primarily force-of-nature events in Cambodia, Indonesia, Japan, Myanmar, Thailand, Nepal, and the Philippines. We will use co-production of knowledge methods to maximize local research ownership and uptake of recommendations, including policy dialogues and workshops.

What we want to do

Overall, we focus on making contributions in three main areas—research, policy, and education. Research goal: we aim to advance theoretical understanding of social-ecological interactions, which provides a common platform of multiple values for policymakers to inform, decide, and design policies and governance. Policy goal: this research seeks to be policy-relevant and transdisciplinary by involving community members, industry representatives, policymakers, and practitioners in the design, implementation, and evaluation of research in all of our case studies. Educational goal: this research intends to influence how sustainability is taught in universities by collaborating with scholars and educators and to build a next generation of researchers and policymakers through engagement with research networks.

Sub Leader

MIDDLETON, Carl

Chulalongkorn University

Main Members

BISRI, Mizan
CRUZ, Ana Maria
DANIA, Maya
GRUNDY-WARR, Carl
NAW THIRI, May Aye
JUWITASARI, Reni
NAGAMI Kozo
NAITO Daisuke
HARA Yuta
PASCUAL, Unai
SUGIHARA Kaoru
SURIMAS, Thianchai
VADDHANAPHUTI, Chaya
YONG, Ming Li

Asian Disaster Reduction Center/Kobe University
 Norwegian University of Science and Technology
 Mae Fah Luang University
 National University of Singapore
 University of Tokyo
 Mae Fah Luang University
 Tohoku University
 Kyoto University
 Tohoku University
 Basque Centre for Climate Change
 Research Institute for Humanity and Nature
 Thammasat University
 Chiang Mai University
 Singapore University of Social Sciences

Main Field Sites

East and Southeast Asia

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
2025	WONG, Grace	Fair for Whom? Politics, Power and Precarity in Transformations of Tropical Forest-Agriculture Frontiers

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 social-ecological crisis. This project has carried out critical analyses of the complex histories, political and institutional dynamics, and

discursive practices in forest-agriculture frontiers and their consequences on local well-being and ecologies. The rich interdisciplinary datasets and comparative analyses allow us to identify the enabling and hindering conditions for more equitable and sustainable development in frontiers.

| What have we learned and to what extent?

The FairFrontiers research links the global with the local in examining mechanisms of frontier change and inequities, and gives precedence to the non-material, relational and that which are often 'silent' in development processes. We applied political economy methods to examine the interests underlying flows of investments and discourses that take hold in frontiers, and participatory and political ecology approaches to understand local agency, culture and relational values. Methods such as photovoice were important for not just understanding local stories, but also for aligning engagement, resistance and hope. Our research findings suggest that a transformation towards sustainable and equitable development pathways is only possible with disruptions of existing power relations, discursive practices, and incentive structures that are propping up the business-as-usual extractive activities. The interdisciplinarity of studies in five countries across two continents have advanced grounded and contextual understandings of equity, discourse-making and the social-ecological in frontiers.

| Our concept of global environmental studies

The project has contributed to the intellectual thinking around frontiers. Frontiers are not simply remote or far-away spaces, but are spaces 'imagined' as having unlimited possibilities for extraction and framed as being integral to economic activity. The political histories of place matter in how frontier spaces are imagined, territorialized and made investible, and in how local people have engaged, have been displaced or ignored. The project has produced over 30 publications. Our research contributes towards deeper and nuanced understandings of the different mechanisms of frontier-making and local injustices of dispossession and exclusion occurring throughout the Global South, and we join global calls for recognizing local and indigenous rights and their capability as key partners in development processes in frontiers.

| New connections

The project has formed new connections and revived former collaborations with research partners in the study sites. Our partners are diverse and include academic researchers, indigenous and land rights activists, conservation practitioners, government officers and indigenous village members. The close working relationships and trust amongst project members and country partners have led to diverse ways of knowing and understanding equity, well-being and human-nature relations. Transformations require a collaborative weaving of science, knowledges, arts and practice to create a conscientious and collective revolution in how we relate to the planet and to each other. With our project members, we have found kinship for a conscientious and collective revolution through respectful collaborations and a commitment to critical research. The project adopted a transdisciplinary approach to support partners as 'boundary actors' who can translate research results to influence relevant national and regional policy issues, and engage with policymakers, development implementers and other key societal actors beyond the project's lifetime.



Labourers in the oil palm plantations of Campo, southwest Cameroon



Photovoice exhibition & knowledge sharing event in Pitas, Sabah

Project Leader

WONG, Grace

Main Field Sites

Central Africa: Cameroon, Democratic Republic of Congo

Southeast Asia: Indonesia, Malaysia (Sabah, Sarawak), Laos



<https://fairfrontiers.sakura.ne.jp/home/>

FY2026 Transdisciplinary Exploratory Studies

In FY2026, RIHN has launched the **Transdisciplinary Exploratory Studies (ES)**, which enables the implementation of small-scale, short-term research aimed at contributing to solutions for global environmental problems. Unlike previous years, preparatory research schemes for full-scale research projects such as the **Incubation Studies (IS)** and **Feasibility Studies (FS)** are not being conducted this fiscal year.

Following an open call for proposals both within Japan and internationally, and a review process based on established selection criteria, the 13 research topics listed below were selected.

Principal Investigators are appointed as RIHN Collaborative Researchers or in an equivalent capacity. They are able to participate in seminars and other events organized by RIHN, collaborate with ongoing research projects, and make use of RIHN's facilities and researcher networks. In addition, three specially appointed professors—**MATSUDA Motoji**, **SHOBAYASHI Mikitaro**, and **TANIGUCHI Makoto**—provide ongoing mentoring and advisory support based on their extensive experience in interdisciplinary and transdisciplinary research.

As a research institute with an academic foundation in transdisciplinary research that seeks pathways to solving societal and environmental challenges through collaboration among researchers as well as diverse stakeholders from the private sector, government, and other sectors, RIHN aims to broaden the base of interdisciplinary and transdisciplinary research. Through this program, RIHN provides opportunities for early-career researchers, researchers seeking to expand their work in interdisciplinary and transdisciplinary directions, as well as practitioners from industry and government to gain experience in such research approaches, while also strengthening and expanding RIHN's research networks.

Principal Investigator	Research Title
AKAMINE Jun (Hitotsubashi University)	Redesigning Oil Palm Landscapes: Lipid Sovereignty and the Political Economy of Tropical Oils
ARIMA Keiko (Kyoto University)	An Anthropological Study on the "Movement" and "Localisation" of Yeast: Focusing on the Interaction between Microbial Environments and Human Cultural Activities
FLORES Urushima Andrea Yuri (Fukui Prefectural University)	Trust infrastructures and cultural landscape formation in fisheries certification: A historical analysis of land-sea systems in Wakasa Bay.
FUKUBAYASHI Nao (Ochanomizu University)	Creating Symbiotic Identities through the Reconstruction of Local Values: A Study in Western Kanagawa
HAYASHI Gohey (Tokyo University of Foreign Studies)	Dynamic Preservation of the Commons via "Sato-Warabi": Constructing an Autonomous Management Model through the Utilization of Snow-Adapted Genetic Resources and Narrative Feedback
KANBARA Sakiko (Kobe City College of Nursing)	Transdisciplinary Exploratory Study to Make 'Invisible Care' Visible in the Planetary Health Era: Unpaid Care Work Embedded in Living Culture and Semi-Public Care Spaces for Regional Resilience Design
KITAZAWA Daisuke (The Japan Association of Rural Solutions for Environmental Conservation and Resource Recycling (JARUS))	A Study on the Succession of Utilization and Management of Secondary Natural Environments — Case Studies on 'Tanbo no Gakkō (Rice Field School)' and Rural Nature Restoration Activities —
MARUYAMA Masaki (Japan International University)	Natural Language Processing Approach to the Transformation of Environmental Ethics through Dialogue with Virtual Future Generations using Generative AI
NISHIKAWA Masafumi (octangle LLC)	Implementing "Playfulness" to Connect Urban Waste, Traditional Knowledge, and Biotechnology: Exploring a Material Co-creation Platform for Unconscious Behavioral Change
ONISHI Yuko (Doshisha University)	Evaluating Sustainability Literacy in Transdisciplinary Education: Metric Development, Validation, and Application
SAWAZAKI Ken'ichi (RIHN)	An Environmental Ethics of "Non-Resistant" Intervention: A Transdisciplinary Exploratory Study Re-Describing Japanese and French Gardeners' Practices through In-Between Mediation and Comparative Montage
SUN Shiyu (International Research Center for Japanese Studies)	Environmental Impacts of Free Menstrual Product Provision: A Transdisciplinary Exploratory Study Focused on Scotland and Japan
WATANABE Haruna (Sakanotochu Ltd.)	The Roles and Limitations of Organic Farmers' "Communities of Practice" for Sustainable Rural Societies: A Collaborative Study in Hokuto City, Yamanashi Prefecture

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

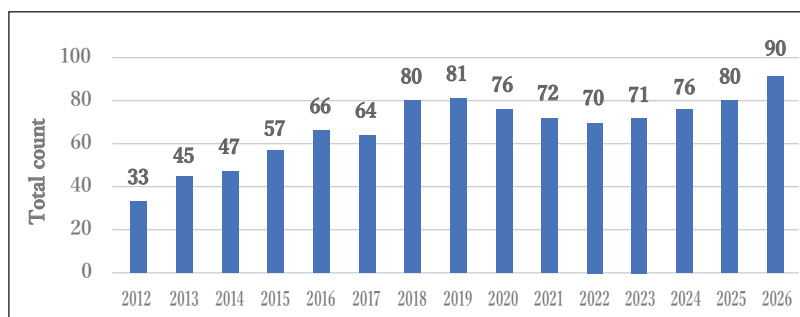
The Environmental Isotope Study Collaborative Research Program uses isotope method which is used in subdivided specialized academic fields, such as geochemistry, hydrology, ecology, geology, mineralogy, anthropology, food science (locality determination), and forensic science. The isotope method, which 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/>)

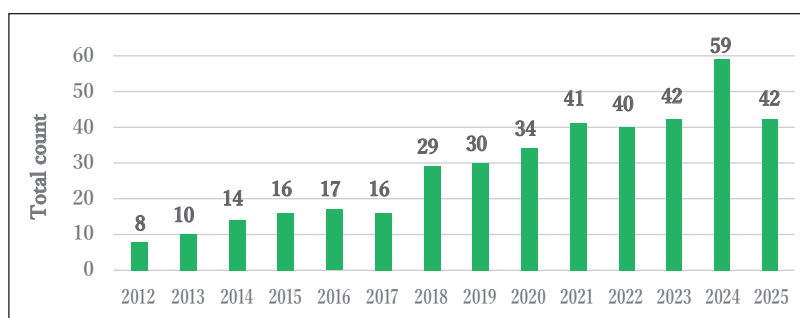
In FY2025, 55 “General Collaborative Research” proposals, 7 “Laboratory and Analysis Divisional Collaborative Research” proposals, and 18 “ORNHIA-Joint Research” collaborative research proposals were selected for the Environmental Isotope Study Collaborative Research Program. In addition, between FY2012 and FY2025, 57 national and public universities, 20 private universities, 40 national and public research institutes, and 26 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 (269 researchers from 58 institutions in FY2025) 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.



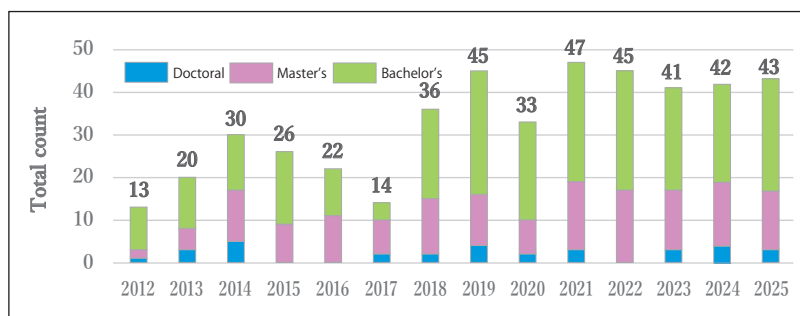
Number of accepted proposals for the Collaborative Research Program



Number of published papers from the Collaborative Research Program

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



Number of academic theses using common equipment

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.



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 equipment 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 the division publishes comprehensive information on its website, such as laboratory facilities, common equipment, sample storage and user instructions. Additionally, the division provides technical measurement support, and organizes online guidance, weekly information exchange meetings 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. 38-39)
- Contribution to advanced collaborative research for both inside and outside RIHN.

Head

TAYASU Ichiro

Professor

Main Members

SHIN Ki-Cheol

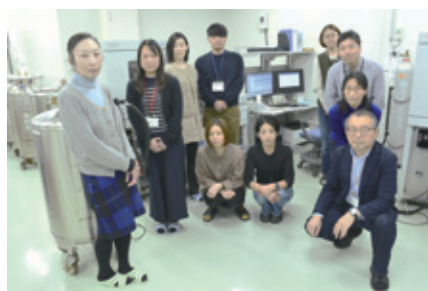
Associate Professor

YABUSAKI Shiho

Senior Researcher

YOSHIMIZU Chikage

Senior Researcher



Please feel free to contact our team 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



RIHN-DAS: The newly introduced RIHN data centric system

Education Division

The Education Division aims to establish pedagogies of global environmental studies and to cultivate diverse talents through managing the Global Environmental Studies Program of The Graduate University for Advanced Studies, SOKENDAI, and supporting its students, as well as educational practices and deployment of teaching materials.

Main Commitments

- Provide mentorship to SOKENDAI students as an advising faculty
- Match prospective students to host faculties
- Create exhibition pamphlets and hands-on kits
- Provide opportunities for on-demand lectures
- General coordination of the education-related projects operated by different sections



Training program for schoolteachers



Guest lesson at an elementary school

Head

KONDO Yasuhisa Professor

Main Member

ASARI Misuzu Professor

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 international publication of RIHN research and the publishing capacity of early-career researchers.

Ichihara Masako's book *Climate Change Litigation in Japan* was published in 2026. It is the first volume in the National Institutes for the Humanities new book series 'NIHU Studies in the Humanities' published with De Gruyter Brill. Assistant Professor Ichihara worked in the Climate Change Adaptation Center at RIHN before taking her current position at Kyoto University.

Main Commitments

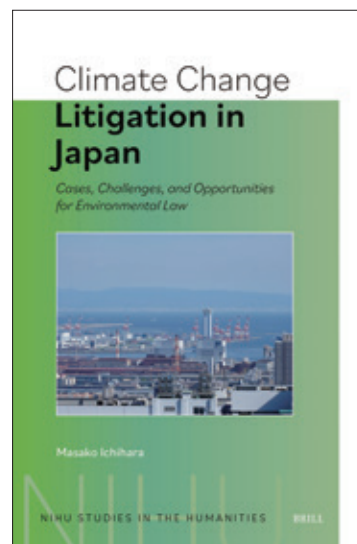
- Support for RIHN international publications
- Collaboration with Future Earth networks (see p. 43)
- Promotion of RIHN approaches within broader research communities
- Capacity building for early-career researchers within and outside RIHN

Head

NILES, Daniel Professor

Main Member

LAMBINO,
Ria Adoracion Apostol Specially Appointed Specialist



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)

The Green Knowledge Center was established to develop and utilize green human resources (individuals who create sustainable environments, including economic activities, based on the concept of global commons) and to formulate and implement measures for building a society that simultaneously achieves the three pillars considered essential for solving global environmental issues: Carbon Neutrality (CN), Circular Economy (CE), and Nature Positive (NP).

In addition to universities and research institutions nationwide, it aims to collaborate with industry (companies, etc.) and the public sector (local governments, NGOs, etc.) to co-create an intellectual infrastructure that accelerates the development and utilization of green human resources.

Head

ASARI Misuzu

Professor

Main Members

SUDO Tomonori

Professor

OKADA Saeko

Associate Professor

MIWA Akimasa

Specially Appointed Assistant Professor

SUZUKI Chiyo

Specially Appointed Professional



The Green Co-Creation EXPO 2026 (February 13-14, 2026), designed to foster networking among industry, academia, and government, brought together approximately 1,000 diverse stakeholders.

University Coalition to Co-create a Sustainable Society

This coalition envisions building a sustainable society through integrated development with Circular Economy (CE) and Nature Positive (NP), while anchoring its efforts in achieving the 2050 Carbon Neutrality goal. Approximately 200 universities participate in the coalition, promoting the horizontal dissemination of initiatives and results, the social implementation of research and development that generates innovations, and the strengthening of networks and communication capabilities through collaboration with national and local governments, companies, domestic and international universities, research institutions, and others.

The Green Knowledge Center, which serves as the secretariat for the coalition, organizes general meetings and symposiums for the coalition and supports networking among participating organizations.



University presidents from across the country also participated in the general meeting.

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

Main Members

RAHMAN, Md. Habibur	Researcher
OKAMOTO Takako	Research Associate
OKA Masami	Research Associate

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.

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.



Photo 1: TERRA⁺ School participants engaged in shimenawa (sacred rope) making during a field visit to Keihoku, Kyoto, where they explored local sustainability initiatives including a biogas plant and repurposed school facilities addressing population aging and resource circulation. (December 2025)



Photo 2: The Asia Impact Forum, co-organized by Asia Science Mission, Thailand Ministry of Higher Education PMU-B, and Future Earth Thailand, brought together 150 leaders from philanthropy, development finance, government, science, and communities to discuss catalytic science, policy, and investment (Bangkok, February 2026).

Kyoto Climate Change Adaptation Center (KCCAC)

Founded in 2021 by Kyoto Prefecture, Kyoto City, and RIHN, KCCAC promotes local adaptation to climate change based on regional natural, historical, and cultural contexts.

Head YASUNARI Tetsuzo Visiting Professor

Secretary General ISHII Reiichiro Associate Professor

Human civilization has caused global environmental changes so profound that we are said to have entered a new epoch — the Anthropocene. As a result, we now face serious environmental problems that threaten people's lives and the sustainability of our societies. To address climate change —one of the most serious global environmental issues— we must not only reduce greenhouse gas emissions such as CO₂ worldwide to mitigate climate change, but also consider how each region's communities —shaped by their own natural environments, histories, and cultures— can adapt to climate conditions that will not return to their previous state anytime soon. The Kyoto Climate Change Adaptation Center aims to find comprehensive solutions by examining the relationship between nature and society through the lens of Kyoto, a region with deep cultural and historical heritage, and by connecting local actions to global efforts.

In FY2025, marking the fifth year since our establishment, we are advancing our ongoing analyses of heat-related impacts with greater precision by using newly available, high resolution climate data for past 20 years. In particular, by cross-referencing reported cases of heatstroke in the Kyoto area with the meteorological conditions at the time and location of onset, we are exploring how warning indices can be refined to better reflect actual risk.

We are also analyzing temperature change in Kyoto by comparing observations from the Kyoto Botanical Garden with those from the Kyoto Local Meteorological Observatory located in the urban core, in order to disentangle the respective influences of global climate change and urbanization.

KCCAC 公開シンポジウム 参加無料
要申込・先着順

私たちは気候変動に どう向き合っ ていくべきか

—今の暑さをしのぎながら
将来の温暖化をやわらげるには—

深刻化する気候変動により記録的な暑い夏が続いています。暑さから命を守りながら、同時に将来のさらなる温暖化をくい止めるために、私たちに何かできるのか、一緒に考えてみませんか？

プログラム
基調講演
地球温暖化の緩和策と適応策の接点
—自治体の地球温暖化対策計画の
見直し事例より—
島田 幸司 京都市立総合政策研究センター長

日時 2025年
12月11日(木)
13:30~16:00
(開場13:00)

場所 キャンパスプラザ京都
4階 第3講義室 定員150名
〒600-8274 京都府下京区西門外通少路下る

オンライン 定員300名
お申し込み時に登録いただいたメールアドレスに
zoomURLを配信いたします

申込方法
下記URLより事前申込をお願いします
<https://kccac.jp/symposium/>
締切 2025年12月10日(水) 17:00
※定員に達した場合は事前に申し込みを締め切ります

お問い合わせ
京都気候変動適応センター (後京都府環境学研究所内)
mail: contact@kccac.jp
tel: 075-707-2261 (※月 10:00-17:00)

パネリスト・モデレーター
京都における気候変動への
「変革的適応」の可能性をさぐる
パネリスト
一原 寛子 京都市立総合政策研究センター長
西條 真貴 京都府立総合政策研究センター長
島田 幸司 京都市立総合政策研究センター長
モデレーター
石井 健一郎 京都府環境学研究所 研究員(総務課)

京都気候変動適応センター
Kyoto Climate Change Adaptation Center
主催：京都府環境学研究所
共催：京都市、京都府、京都府立総合政策研究センター

Supported by the
Ministry of the Environment and Nature
2022-2024 京都府環境学研究所

Public Symposium "How Should We Respond to Climate Change? — Coping with Today's Heat While Easing Future Warming" (December 11, 2025)

Uehiro Research Center for Japan Environmental Studies

The Uehiro Research Center for Japan Environmental Studies (UJES) 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

ITOH Noriko

Senior Researcher

LEE Kwangho

Senior Researcher

SHIMIZU Hiromi

Research Associate

NOSE Yasuko

Research Associate

KAN Ayami

Research Associate

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.

Since its establishment, UJES has brought together scholars from fields including primatology, anthropology, and philosophy to rethink human–environment relationships beyond a human-centered view. Using the concept of *Awai*, the “in-between” space connecting humans and nature, the Center explores cultural, ethical, and ecological perspectives on how we interact with the environment.

In 2025, the Center advanced research and field projects in Japan and abroad, focusing on potential research bases in Takahata, Yamagata, and Yakushima, Kagoshima. Activities included public lectures, school farm programs, high school seminars with international scholars, and philosophy dialogues for children. Learning workshops for educators encouraged sharing ideas and new approaches. These efforts aim to build networks, foster interdisciplinary dialogue, and promote sustainable human–nature relationships through hands-on, locally grounded learning.

Continuing from last year, UJES has held AI + Compassion seminars and workshops exploring Kyoto’s nature and traditional culture for high school and university students as well as the public, with a focus on supporting the development of young people.

On September 11, 2025, UJES and the Indian Institute of Science (IISc) held a hybrid international meeting called “Living Together: Human–Wildlife Relationships in a Changing World – Exploring Ecological, Ethical, and Cultural Dimensions of Coexistence.” Participants explored how humans and wildlife, especially elephants and primates, can coexist amid climate change and changing land use, considering cultural, ethical, and ecological perspectives. They stressed the importance of respecting local knowledge while improving practices and institutions. In the following two days, field visits to two national parks allowed discussions on real-world coexistence challenges. The meeting served as a stepping stone for possible collaboration across national and disciplinary boundaries, while also opening new avenues for exploring human evolution and coexistence through the concept of *Umwelt*, which refers to the distinctive ways in which different living beings perceive and relate to their surroundings.



Photo 1: AI + Compassion Kyoto Mangathon workshop



Photo 2: Observation of Asian elephants at Bandipur National Park

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 as a national university 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 role of the inter-university research institutes and the world-class research environment they offer as centers of educational excellence is one of the most distinctive features 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 comprehensively 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
- Possible 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, 2026)

	Domestic	International	Total
1st year	5	1	6
2nd year	0	1	1
3rd year	5	1	6
Total	10	3	13

| 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 2026 Entrance Ceremony

List of Faculty Members “As of April 1, 2026”

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

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
NGUYEN, Tien Hoang Associate Professor	Geoinformatics, Human Ecology, Planetary Health	Research on identifying feasible solutions to improve human well-being and equity while safeguarding the environment
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
SUDO Tomonori Professor	Environmental Economics, Environmental Policy, International Cooperation Policy	Sustainability of environmental value and strategies for its utilization in economic and social growth, marketization of environmental value and its application to finance
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
TAMURA Norie Associate Professor	Agricultural, forestry, and fishery policy, Commons theory, Sustainability science	Agriculture and forestry coexisting with diverse living organisms and the land use that supports it

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 three 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, 28 volumes have been published.



| RIHN Book Series

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



| 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.



| Other Achievements

RIHN researchers and projects also publish a variety of individual volumes on specific themes.



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

| YouTube @CHIKYUKENofficial



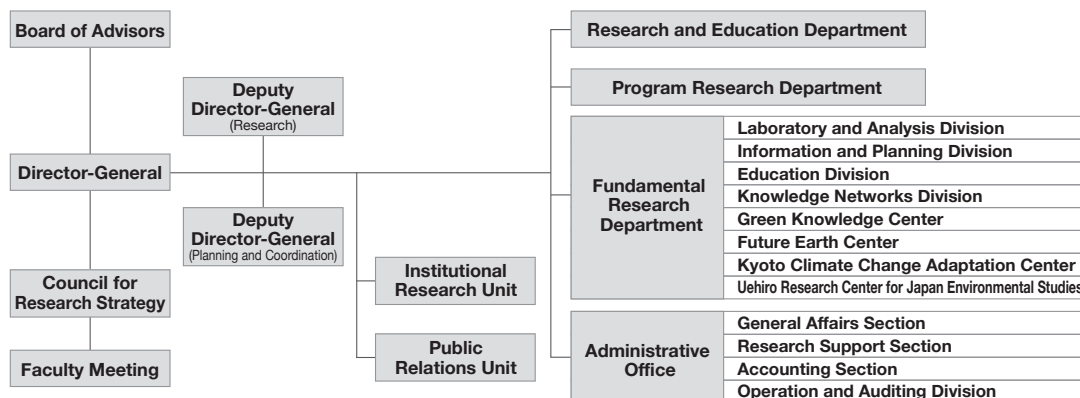
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| note @rihn_official



Institute Information

Organization *As of April 1st, 2026



YAMAGIWA Juichi	Director-General	NILES, Daniel Ely	Head of Knowledge Networks Division
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 Green Knowledge Center	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
KONDO Yasuhisa	Head of Education Division	SATO Hideo	Administrative Director, Head of Public Relations Unit

Boards and Committees *As of April 1st, 2026

Board of Advisors

Oversees personnel, planning, administration and operation of the institute

EMORI Seita	Professor/Vice Director, Institute for Future Initiatives, the University of Tokyo	SHINODA Ken-ichi	Advisor, National Museum of Nature and Science
KAMEYAMA Yasuko	Professor/Director, Sustainable Society Design Center, Graduate School of Frontier Sciences, the University of Tokyo	UCHIDA Yukiko	Professor/Director, Institute for the Future of Human Society, Kyoto University
KOBAYASHI Izumi	Outside Director, OMRON Corporation	UEHARA Mayuko	Professor, Graduate School of Letters, Kyoto University
NAKANO Shin-ichi	Professor/Vice Director, The Center for Ecological Research, Kyoto University	TAYASU Ichiro	Deputy Director-General, RIHN
NAKAI Tokutaro	Representative Director, The Millennium Sustainability Foundation/ Specially-Appointed Professor, Japan University of Economics	ASARI Misuzu	Deputy Director-General, RIHN
NAGAO Seiya	Professor/Vice Director, Institute of Nature and Environmental Technology, Kanazawa University	MATSUDA Motoji	Program Director, RIHN
SATO Jin	Professor/Director, Institute for Advanced Studies on Asia, the University of Tokyo	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>					
MUTO Megumi	Managing Executive Officer, Deputy Chief Sustainability Officer, Mizuho Financial Group	HAYASAKA Tadahiro	Associate Executive Vice President, Tohoku University/Professor, Graduate School of Science, Tohoku University		
MOJI Kazuhiko	Visiting Professor, Graduate School of Tropical Medicine & Global Health, Nagasaki University	KUSAGO Takayoshi	Professor, Faculty of Sociology, Kansai University		
YOSHIDA Naohiro	Specially Appointed Professor, Earth-Life Science Institute (ELSI), Institute of Science Tokyo/Professor Emeritus, Tokyo Institute of Technology/Executive Researcher, National Institute of Information and Communications Technology (NICT)	SHIROYAMA Hideaki	Professor, Graduate Schools for Law and Politics, The University of Tokyo		
		HAYAMI Yoko	Inspector General, Japan Society for the Promotion of Science (JSPS)/Emeritus Professor, Kyoto University		
<i>Overseas</i>					
AILIKUN	Professor, Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Beijing, China	HELGESON, Jennifer F.	Research Economist, Acting Program Manager, National Institute of Standards and Technology, U.S.A.		
JOULIAN, Frederic	Professor, Centre de Recherche et de Documentation sur l'Océanie, EHESS-CNRS-AMU, France	MEINZEN-DICK, Ruth	Emeritus Fellow, The International Food Policy Research Institute (IFPRI), U.S.A.		
KIRUMIRA, Edward K.	Director, Stellenbosch Institute for Advanced Study/Professor Extraordinary, Department of Sociology and Social Anthropology, Stellenbosch University, Stellenbosch, South Africa	ANNE Larigauderie	Former Executive Secretary, IPBES/Independent Science and Policy Advisor, France		
STRIER, Karen B.	Vilas Research Professor & Irven DeVore Professor, Department of Anthropology, University of Wisconsin–Madison, U.S.A.	LORRAE Van Kerkhoff	Professor, Fenner School of Environment and Society, The Australian National University, Australia		

Senior Advisor・Emeritus Professor・Honorary Fellow

TACHIMOTO Narifumi	Emeritus Professor	NAKANO Takanori	Emeritus Professor
YASUNARI Tetsuzo	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, 2026

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, Deputy Chair, Global Environmental Studies (SOKENDAI), 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 Head of Education Division, Chair, Global Environmental Studies (SOKENDAI)
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)
SUDO Tomonori	Environmental Economics, Environmental Policy, International Cooperation Policy	Research and Education Department, Fundamental Research Department (Green Knowledge Center)

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	Research and Education Department, Fundamental Research Department Head of Uehiro Research Center for Japan Environmental Studies

Associate Professor

HONGO Shun	Conservation Science, Wildlife management, Primatology	Research and Education Department, Program Research Department (Fashloks Project)
ISHII Reiichiro	Theoretical ecology	Research and Education Department, Fundamental Research Department (Information and Planning Division)
NGUYEN, Tien Hoang	Geoinformatics, Human Ecology, Planetary Health	Research and Education Department, Program Research Department (ECOIP Project)
OKADA Saeko	Public relations, Science communication	Research and Education Department, Fundamental Research Department Media and Special Projects Coordinator to the Director
SHIN Ki-Cheol	Petrology, Geochemistry, Isotope geology	Research and Education Department, Fundamental Research Department (Laboratory and Analysis Division)
TAMURA Norie	Agricultural, forestry, and fishery policy, commons theory, Sustainability science	Research and Education Department, Program Research Department (Pluriverse Project)
WATANABE Tsuyoshi	Environmental earth science, Coral reef environmental earth sciences	Research and Education Department, Program Research Department (SceNE Project)
YASUMOTO Jun	Hydrology, Agricultural Engineering	Research and Education Department, Program Research Department (LINKAGE 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

MIWA Akimasa	Environmental Engineering / Ecological Engineering (Constructed Wetlands / Waste water Treatment)	Research and Education Department, Fundamental Research Department (Green Knowledge Center)
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

KAWAHARA Yuko	Media Studies	Program Research Department (Global Environmental Culture Program)
TANABE Kantaro	Archaeology	Fundamental Research Department (Education Division)

Senior Researcher

Ei	Ecology and Environment; Area Studies	Program Research Department (SATOCONN Project)
ITO Noriko	Anthropology, Primatology	Fundamental Research Department (Uehiro Research Center for Japan Environmental Studies)
LEE Kwangho	Environmental Policy and Governance, Environmental Management, Area Studies	Fundamental Research Department (Uehiro Research Center for Japan Environmental Studies)
MURAMATSU Daisuke	Ethology, Ecology, Environmental Education	Program Research Department (Fashloks 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 (Sustai-N-able (SusN) Project)
HANZAWA Maho	Primatology, Ethology	Program Research Department (Fashloks Project)
HASHIZUME Akane	Community Ecology, Carrion Ecology	Program Research Department (Fashloks Project)
KAMGAING TOWA, Oliver William	Wildlife management	Program Research Department (Fashloks Project)
LEONG, Chris	Hydrology	Program Research Department (LINKAGE Project)
MONSALVE CUARTAS, Ana Maria	Landscape ecology	Program Research Department (Fashloks Project)
MURATA Takeshi	Geo-Informatics, Well-being Informatics	Fundamental Research Department (Information and Planning Division)
NODA Kentaro	Area studies, Ecological anthropology	Program Research Department (Organic Material Circulation Project)
RAHMAN, Md.Habibur	Biomass energy and policy, Climate change, Co-management, Forest products and livelihoods, Sustainable development	Fundamental Research Department (Future Earth Center)
SAIKI Makoto	Material cycle, Water environment	Program Research Department (Sustai-N-able (SusN) Project)
SEKINO Ayako	Anthropology	Program Research Department (Fashloks Project)
SICHENG He	Meteorology, Climatology	Fundamental Research Department (Kyoto Climate Change Adaptation Center)
TOMOJIRI Daiki	Ecology, Area studies	Program Research Department (LINKAGE Project)

Visiting Professor

BABA Kenshi	KUSAGO Takayoshi
FUKUDA Ikuhiro	MALLEE, Hein
HABU Junko	MATSUMI Yutaka
HARA Takeshi	MASUHARA Naoki
HASEGAWA Yuko	MIZUNO Kosuke
HAYASHI Hiroaki	NAKAGAWA Yoshinori
HAYASHIDA Sachiko	NAKAJIMA Sachiko
KADA Yukiko	NAKATSUKA Takeshi
KANIE Norichika	NIKAWA Tatsuro
KASUGA Fumiko	PATRA, Prabir
KONO Yasuyuki	SAIJO Tatsuyoshi
KOZAN Osamu	SAKAI Shoko
KUDO Taiko	SAKAKIBARA Masayuki
	SATO Tetsu

SHINJO Ryuichi
SUEMATSU Hiroyuki
SUGIHARA Kaoru
TERADA Masahiro
UEHARA Mayuko
Uwe Latacz-Lohmann
YAMAUCHI Taro
YASUNARI Tetsuzo
YOSHIDA Takehito

Visiting Associate Professor

AOKI Eri
IUE Minako
KANEMOTO Keiichiro
KIHARA Hiroataka
MCGREEVY, Steven Robert
MOTOHASHI Jin
MURAKAMI Taikyo
ONISHI Yuko
OTSU Eri
SHIMIZU Takao
WONG, Grace Muu Yee

Visiting Assistant Professor

ICHIHARA Masako

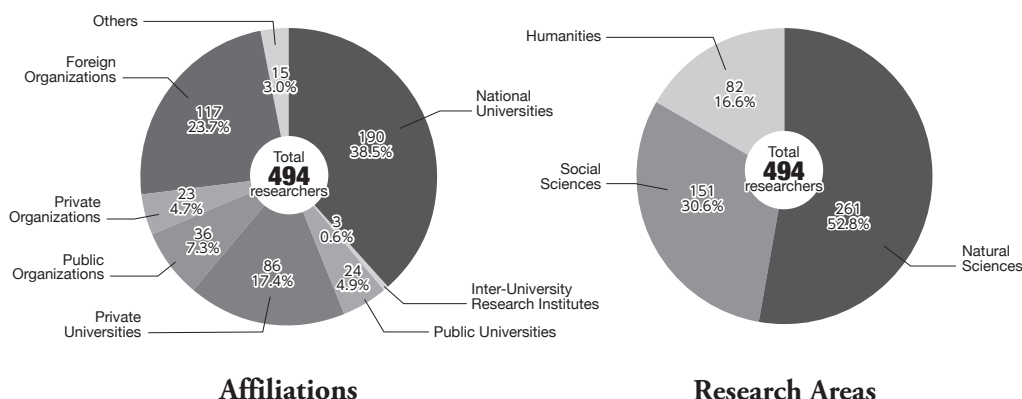
Budget (FY 2026)

	Amount (Yen in thousands)
Income	1,434,832
Subsidy for Operation	1,419,152
Self Revenue	15,680

External Sources of Funding (FY 2025)

Category	Amount (Yen in thousands)
Fund for Promotion of Academic and Industrial Collaboration	162,085
Grants-in-Aids for Scientific Research (KAKENHI)	49,660
Donations for Research	111,394

Collaborative Researchers *As of March 31st, 2026



Domestic Collaboration *As of April 1st, 2026

RIHN has concluded 29 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
14. The Graduate School of Project Design

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, 2026

RIHN has actively concluded 22 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.

Algeria	-Ferhat Abbas Setif 1 University (Twinning Agreement)	Korea	-Institution for Marine and Island Cultures, Mokpo National University
China	-East China Normal University		-Mineral Resources Division of Korea Institute of Geoscience and Mineral Resources (KIGAM)
	-Hainan Provincial Center for Disease Control and Prevention / Hainan Provincial Preventive Medicine Association	Laos	-Lao Tropical and Public Health Institute, Ministry of Health, Lao PDR
Gabon	-National Center for Scientific and Technological Research (CENAREST)	Malaysia	-Universiti Malaysia Sabah
Ghana	-University of Ghana	Netherlands	-Copernicus Institute of Sustainable Development, Utrecht University
India	-Indian Institute of Technology - Delhi		-Sultan Qaboos University
	-Manbhumi Ananda Ashram Nityananda Trust (MANT)	Oman	-Ateneo de Manila University
Indonesia	-Universitas Riau	Philippines	-Kyambogo University
	-Halu Oleo University	Uganda	-University of Gloucestershire
	-Wakatobi Regency	United Kingdom	
	-Institut Teknokigi Dan Bisnis Muhammadiyah Wakatobi	United States of America	-University of California, Berkeley
		Zambia	-University of Zambia

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

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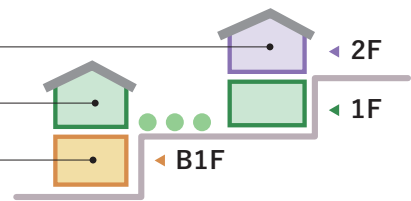
Main Entrance Hall
Exhibition Hall
Lecture Hall
Administration
Seminar Rooms
Dining Hall

1 F

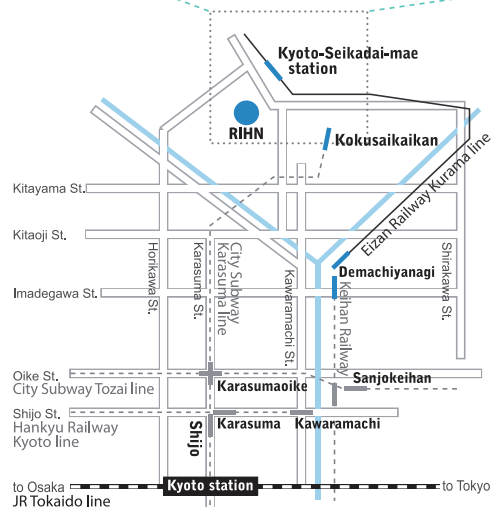
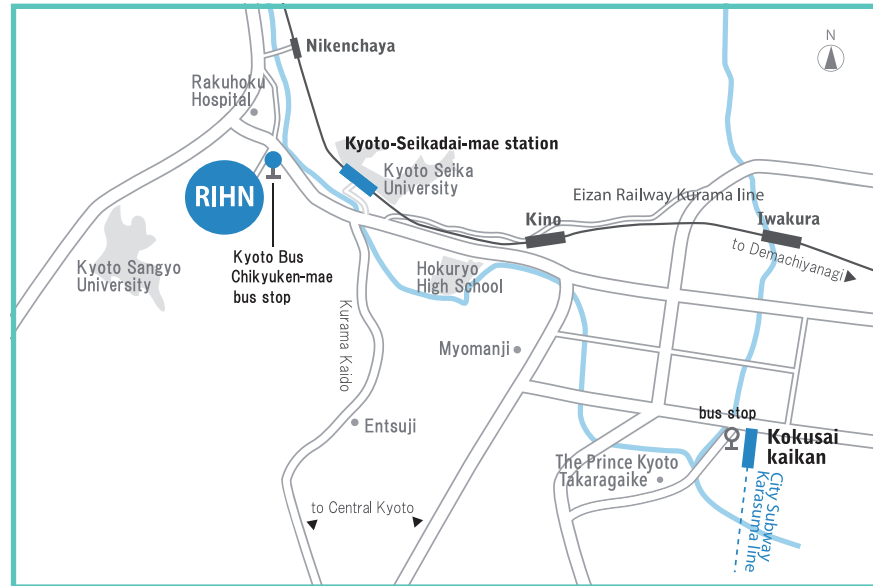
Project Rooms
Fundamental Research Department
Media Center
Library

Basement

Laboratories
Book Repository
Field Research Equipment and Facilities



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
大学共同利用機関法人 総合地球環境学研究所
人間文化研究機構

457-4 Motoyama, Kamigamo, Kita-ku, Kyoto,
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