

# Project Index

Most RIHN research projects are conducted within one of five research domains that reflect 'root metaphors' with significance beyond single disciplines or fields of study.

## Full Research (FR)

### Circulation

Circulation projects investigate the cycling of energy and matter on the Earth's surface in relation to human activity.

|      |   |                                    |       |
|------|---|------------------------------------|-------|
| C-08 | <b>Megacities and the Global Environment</b>                                | MURAMATSU Shin                     | 10-11 |
| C-09 | <b>Designing Local Frameworks for Integrated Water Resources Management</b> | KUBOTA Jumpei<br>Dorotea RAMPISELA | 12-13 |

### Diversity

Diversity projects describe and analyze the formation, maintenance and functions of biological and cultural diversity in specific environments.

|      |  |                  |       |
|------|--|------------------|-------|
| D-05 | <b>Coastal Area Capability Enhancement in Southeast Asia</b> | ISHIKAWA Satoshi | 14-15 |
|------|--|------------------|-------|

### Resources

Projects in this domain examine global environmental issues related to the use and conservation of natural resources.

|      |  |                               |       |
|------|--|-------------------------------|-------|
| R-07 | <b>Desertification and Livelihood in Semi-Arid Afro-Eurasia</b>  | TANAKA Ueru                   | 16-17 |
| R-08 | <b>Human-Environmental Security in Asia-Pacific Ring of Fire: Water-Energy-Food Nexus</b>                      | TANIGUCHI Makoto<br>ENDO Aiko | 20-21 |
| R-09 | <b>Long-term Sustainability through Place-Based, Small-scale Economies: Approaches from Historical Ecology</b> | HABU Junko                    | 22-23 |

### Ecohistory

Ecohistory projects take historical approaches to the study of circulation, diversity, and resources.

|      |  |                   |       |
|------|--|-------------------|-------|
| H-05 | <b>Societal Adaptation to Climate Change: Integrating Palaeoclimatological Data with Historical and Archaeological Evidences</b> | NAKATSUKA Takeshi | 24-25 |
|------|--|-------------------|-------|

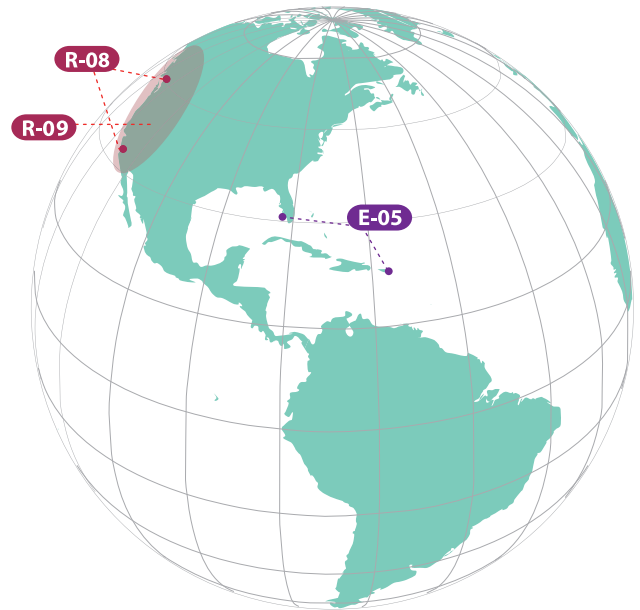
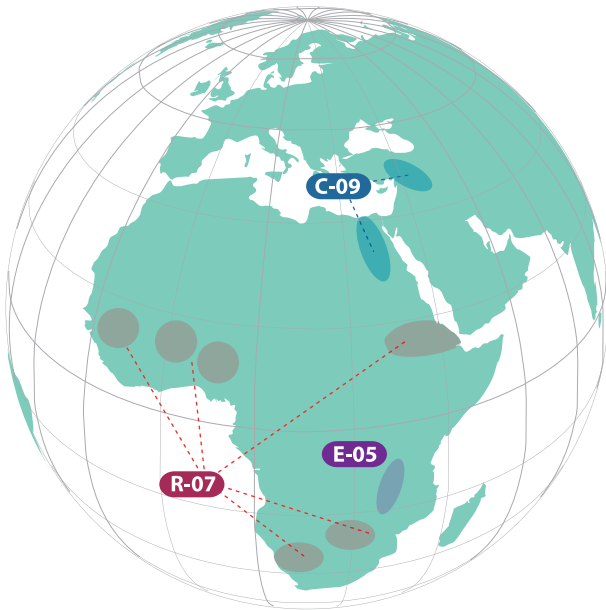
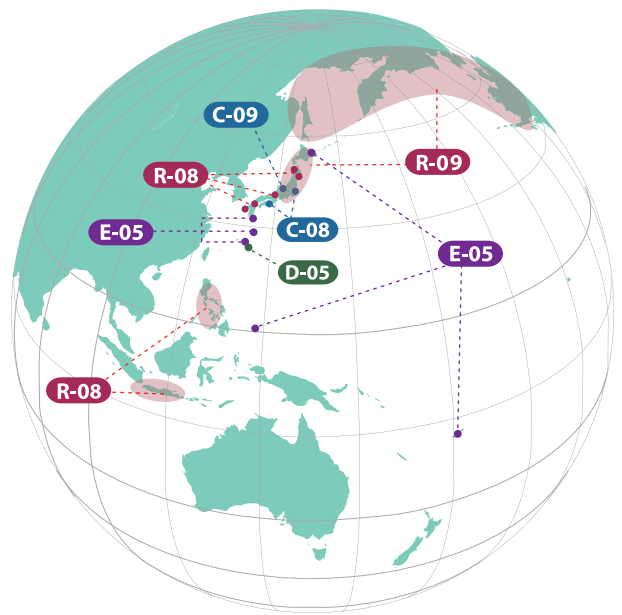
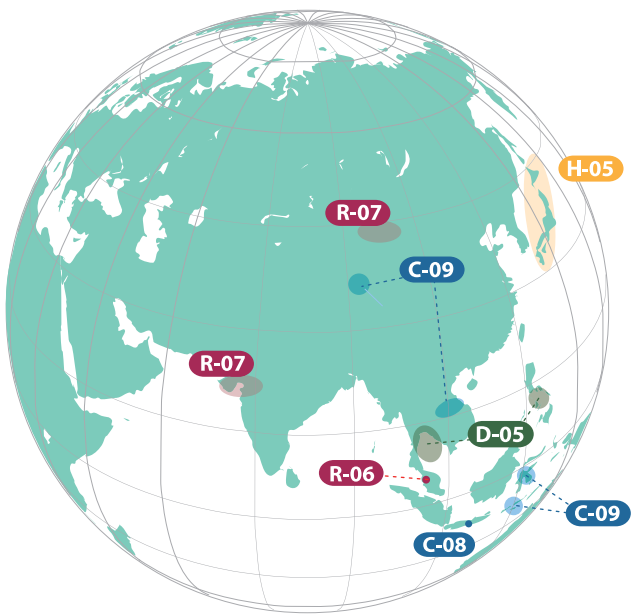
### Ecosophy

Ecosophy projects examine the specific social and environmental contexts in which environmental problems occur, their linkages to social and material phenomena in other places, and the conceptual models used to describe such interconnection.

|      |   |                             |       |
|------|---|-----------------------------|-------|
| E-05 | <b>Creation and Sustainable Governance of New Commons through Formation of Integrated Local Environmental Knowledge</b> | SATO Tetsu<br>KIKUCHI Naoki | 18-19 |
|------|---|-----------------------------|-------|

## Completed Research (CR)

|      |  |                  |    |
|------|--|------------------|----|
| C-07 | <b>Global Warming and the Human-Nature Dimension in Siberia: Social Adaptation to the Changes of the Terrestrial Ecosystem, with an Emphasis on Water Environments</b> | HIYAMA Tetsuya   | 30 |
| D-03 | <b>Human Life, Aging and Disease in High-Altitude Environments: Physio-Medical, Ecological and Cultural Adaptation in "Highland Civilizations"</b>                     | OKUMIYA Kiyohito | 27 |
| D-04 | <b>Collapse and Restoration of Ecosystem Networks with Human Activity</b>  | SAKAI Shoko      | 28 |
| R-04 | <b>Environmental Change and Infectious Disease in Tropical Asia</b>  | MOJI Kazuhiko    | 29 |
| R-05 | <b>A Study of Human Subsistence Ecosystems in Arab Societies: To Combat Livelihood Degradation for the Post-oil Era</b>  | NAWATA Hiroshi   | 31 |
| R-06 | <b>Managing Environmental Risks to Food and Health Security in Asian Watersheds</b>  | KADA Ryohei      | 32 |





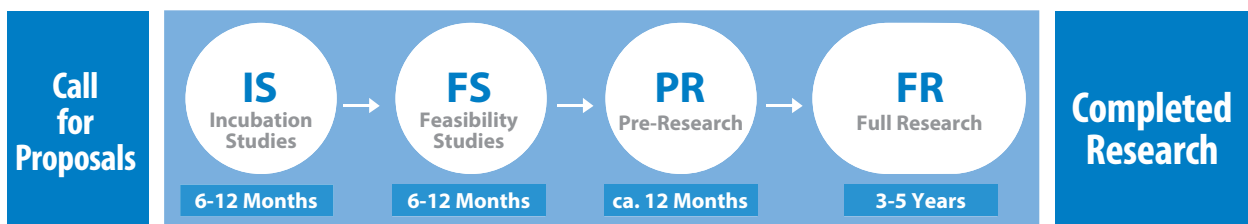
## Research Structure

RIHN's objective is to conduct integrative research on key areas of interaction between humanity and nature. RIHN solicits, develops, funds, and hosts research projects lasting from between three to five years. Projects conduct high quality basic research; they are always multi-disciplinary and based on multiple methodologies. All projects are subject to a rigorous course of internal and external review.

At RIHN we seek concepts, theories and mechanisms capable of describing and enabling transformation of human-environment interactions. RIHN research is increasingly transdisciplinary in that it seeks to redefine the role of science in society, improve dialogue between different traditions of knowledge, and stimulate local, national and international collaborations in the design and production of knowledge concerning key social and environmental problems.

Research projects are conducted within one of three structures, as shown in the figures below. Individual collaboration (formerly domain-based) projects are proposed by Japanese or international researchers. Proposals are developed over the course of 1-3 years (the periods of Incubation- and Feasibility-Study shown below), before entering 3-5 years of Full Research.

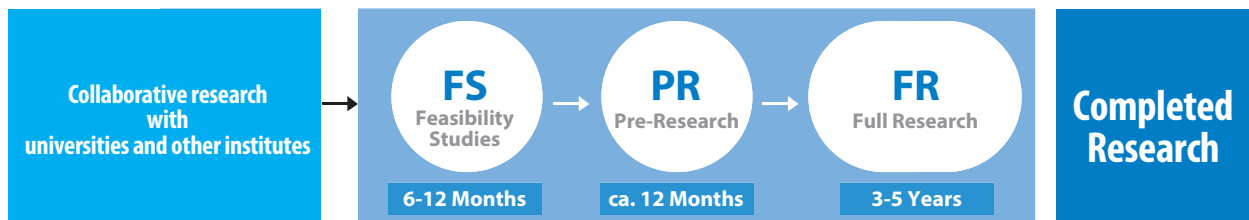
### Individual Collaboration Projects





Institutional-collaboration projects are designed to facilitate close collaboration between RIHN and other leading institutes of environmental study in Japan. They are based around complementary use of institutional resources so as to facilitate novel research questions and techniques. They also proceed to Full Research directly from the period of Feasibility Study.

### Institutional Collaboration Projects



Initiative-based project proposals are generated within the institute itself. These proposals are formulated through a structured process of internal reflection of the strengths and weaknesses in current and past RIHN research as well as ongoing institute engagement with key emerging themes in international research. Initiative-based projects begin as Feasibility Studies and then proceed to 3-5 years of Full Research.

### Initiative-based Projects

