

Current Feasibility Studies

Feasibility Studies are based on proposals solicited annually by RIHN from the research community at-large. If approved by the Project Review Task Committee, lead researchers are granted seed funding in order to develop their proposal for Full Research. FS status can be maintained for no longer than two years.

FS/PR

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

Grace WONG, Stockholm Resilience Centre, Stockholm University

Area : Cameroon, Democratic Republic of Congo, Laos, Myanmar, Malaysia (Sabah & Sarawak)

In many parts of the tropics, forest-agriculture frontiers dominated by diverse swidden landscapes are rapidly being converted to increasingly homogenous landscapes of commodified agriculture. Often labeled as “development”, these transformations have not generated desired social-ecological outcomes and often do not fairly benefit smallholders in these landscapes. Our research thus aims to examine the power relations, politics of forest and land use, and local agency underlying transformations in forest-agriculture frontiers, and assess options for more sustainable and equitable development.



Forest-agriculture frontier in Laos

FS An Ecology of Care Approach to Neurological Disorders: Toward a Comprehensive Model for Care Embedded in a Biosocial Milieu

NISHI Makoto, Kyoto University

Area : Cameroon, Japan, Sri Lanka, Uganda

“Ecology of care” is a framework for multidisciplinary research and practice to address health issues closely related simultaneously to biological and social milieus. This research project focuses on epilepsy and dementia as two common neurological diseases. It aims to understand knowledge, technologies, and values as factors that determine the quality of life of individuals and families affected by these diseases in various ecological and social settings. Livelihood, disease burden, care relationships, and social conflicts are among the major areas of concern.



Farmers engaged in farming activity in a village in northern Uganda which was recently affected by an epidemic of epilepsy.

FS Metacognitive Interventions on Social Actors to Enable the Transition Toward a Sustainable Society

NAKAGAWA Yoshinori, Kochi University of Technology

Area : Pokhara City, Kathmandu

Due to financial difficulties, many developing countries are poorly managing wastes, and this is causing environmental degradation and public health problems. By taking the perspective of the future generation, the present society may regret this prioritization and the lack of creativity in addressing waste management and other policy goals. The present study aims to investigate whether and why a metacognitive strategy may improve waste management in Nepal.



One scene of a picture-story developed by this project to share the reality of environmental degradation in Sisdol landfill site, Kathmandu City, Nepal.

FS Developing Inclusive Wealth with Clarifying Mechanism of Social Value Formation and Application to Sustainable Policy Design

MANAGI Shunsuke, Kyushu University

Area : Japan and other countries

In the arena of global environmental policy, the past several decades have seen some major accomplishments in setting goals. At the onset of 2016, the United Nations ushered in a very ambitious list of goals to be achieved by 2030. The 17 Sustainable Development Goals (SDGs) include the elimination of poverty and hunger, realization of gender equality and reduction of social inequalities, as well as peace, justice, and new institutions and partnerships. The 13th goal of SDGs is devoted to “Take urgent action to combat climate change and its impacts.” Accordingly, the Paris Agreement was reached at the COP21 on 12 December 2015, and entered into force in the next year. In particular, the Agreement determines that all countries put an effort to limit global temperature rise to 2 degrees Celsius at most.

This ambitious target-oriented approach to tackling environment and development challenges is commendable in many ways. It serves to share the

status of the topic with a wide audience on the globe. Moreover, the goals may facilitate local regions in the “downscaling” of global goals, leading to local initiatives to complement global solutions. We build on the past achievements of Inclusive Wealth Report (IWR), but extend the analysis both in depth and breadth. In particular, our target is to develop a theory of how the idea of inclusive wealth can be put into general practice. Application came already introducing increase in IW to be the target of Hisayama city at Fukuoka, Japan. We provide national reports to other countries and intend to cooperate with other region too.



Inclusive wealth concept: physical capital + human capital + natural capital = inclusive wealth

FS Adaptive Governance of Multi-Resource based on Land-Sea Linkage of Water Cycle: Application to Coral Reef Island System

SHINJO Ryuichi, University of the Ryukyus

Area : Japan, Palau, Indonesia

People in tropical-subtropical small islands have lived with limited environmental resources. Recent increases in island populations, tourism, and changes in land-use and social structure have modified water and other environmental resources, thereby affecting coastal ecosystems (e.g., coral reef system). Small islands are also vulnerable to global climate change. For sustainable development on islands, our project aims to investigate multi-resource adaptive governance based on land-sea linkage of water cycle in coral reef island system.



Student participation in an action research event in Southern Okinawa, Ryukyu Islands.

Tackling Wicked Problems: Co-creating Serious Games as Transdisciplinary Methods to Solve Socio-Environmental Challenges

OTA Kazuhiko, RIHN

Area : Previous RIHN projects and sites

This proposal creates serious games for TD research addressing environmental and social issues, and develops an underlying methodology to this end. In addition to collaborating with various practitioners using games, the accumulated results of the project will be expressed in the form of a "serious game network." By the end of this Core Project, some of the research results of RIHN will be turned into games, and there will be attractive learning tools for researchers participating in TD research and citizens who want to collaborate.



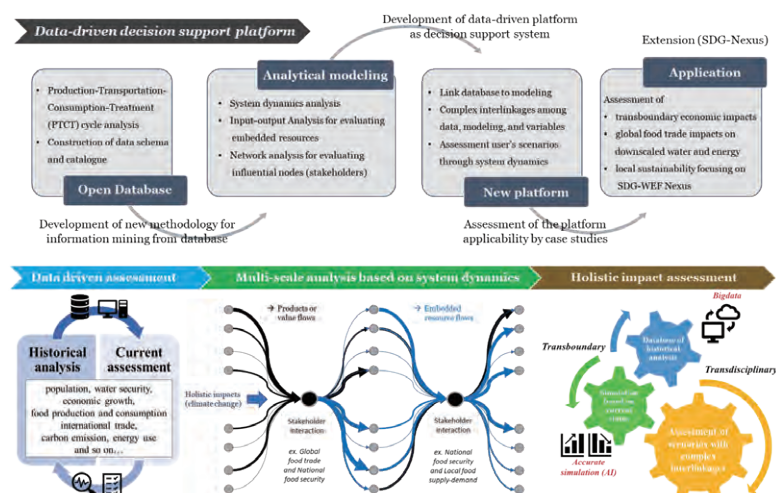
Board game based on the theme of "Tragedy of the Commons". Created by citizens who participated in game jam at RIHN.

Development of Data-driven Decision Support Platform Based on Sustainable Life Cycle Assessment of SDGs Nexus

Sanghyun LEE, RIHN

Area : Japan and Global

Stressors, including climate change, socio-political, economic, and population pressures, challenge sustainable resource management, which are in fact, non-stationary, highly interlinked, and increasingly unpredictable. Accordingly, we need to understand the interaction among resources, management, and multi-scale interaction, in addition to the holistic impacts of stakeholder's actions. The aims of this study are to 1) study new methodologies to analyze the multi-scale impact assessment in the context of complex trade-offs and synergy in SDGs-Nexus; 2) develop a data-driven decision support platform for assessing user scenarios; and 3) assess the applicability of the platform through transboundary and transdisciplinary case studies.



The data-driven decision support system comprising database, multi-scale analysis, and holistic impacts