

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.



Above: UEHARA Yoshitoshi, Promising young researchers, Silang, Philippines

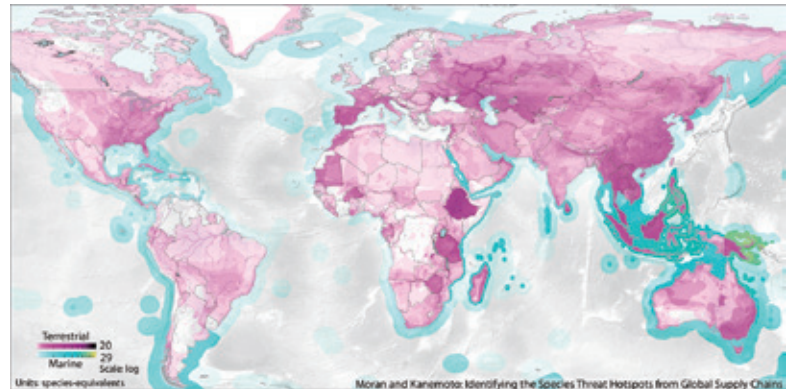
Bottom: OKUDA Noboru, Conducting a biological survey in paddy fields with the local residents, Koga, Shiga, Japan

Mapping the Environmental Impact Footprint of Cities, Companies, and Household

KANEMOTO Keiichiro, Shinshu University

Area : World

Economic growth in China and other developing countries is associated with severe global environmental problems, such as climate change and loss of biodiversity. Studies have shown that consumption in developed countries drives environmental emissions in developing countries. For example, we found that international trade is responsible for one third of the threats to biodiversity, mainly in developing countries. Furthermore, we demonstrated a link between geographical environmental emissions information and global supply chains. Unlike most studies, which focus on environmental emissions and international trade, this is the first study clarify the effect of global supply chains on environmental impacts. Further, in addition to countries and regions, we will estimate the environmental footprint of cities, companies and households.

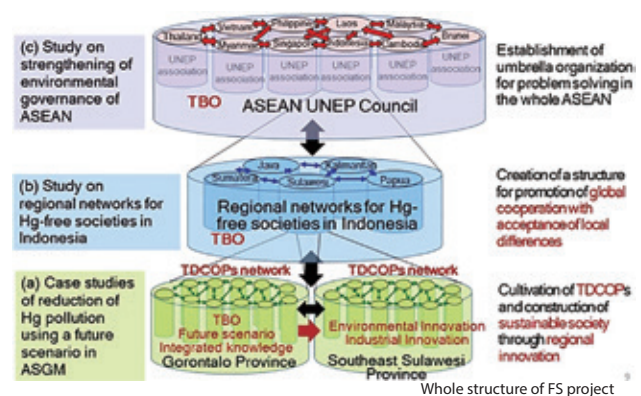


Co-Creation of Sustainable Regional Innovation for Reducing Risk of High-impact Environmental Pollution

SAKAKIBARA Masayuki, Ehime University

Area : Sulawesi Island in Indonesia, ASEAN countries

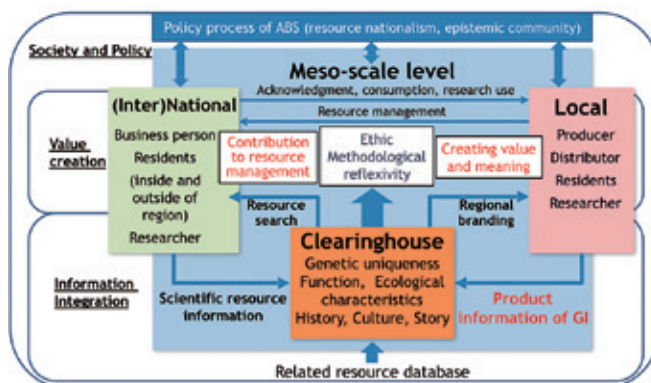
The Minamata Convention on Mercury (Hg) is a global treaty established to protect human health and the environment from the adverse effects of Hg. Recent investigations by the United Nation Environment Programme (UNEP) have highlighted the continuing significance of Hg pollution in developing countries and its harmful effects on human health and ecosystems. One of the main causes of Hg pollution is artisanal and small-scale gold mining (ASGM), in which Hg is used in the traditional method of amalgamation to extract gold from the ore rock. Recent investigations by UNEP have highlighted the enormity of Hg pollution in developing countries and its harmful effects on human health and ecosystems. The purpose of our FR is to understand the link between poverty reduction and environmental management, and to establish develop a process for constructing sustainable societies through regional innovations in ASGM areas and to strengthen related environmental governance in developing countries. In our FS, we will conduct, within the scope of Association of Southeast Asian Nations (ASEAN) countries: a) case studies of reductions in Hg pollution using a future scenario of ASGM; b) a study of regional networks that aim to generate Hg-free societies communities in Indonesia; c) a study of improvements in environmental governance in ASEAN countries; and d) a study of the design, practical use, and evaluation of transformative boundary objects (TBOs), based on a transdisciplinary approach.



FS Fair and Equitable Benefit Sharing of Biological and Genetic Resources in the Era of Digital Information: Improving Livelihoods and Agrobiodiversity Conservation by Intellectual Property and Storylines
KOHSAKA Ryo, Tohoku University

Area : Thailand, Japan, Philippines, Myanmar, South Korea, China, Indonesia

This project addresses fundamental national and local issues of the Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) including (1) the high resource transaction costs caused by lack of relevant information, and (2) lack of incentives for local people. To address the first issue we introduce clearing-house systems to efficiently share relevant scientific and cultural information with stakeholders. To tackle the second issue we develop branding and benefit-sharing schemes using clearing-house systems and scientific methods to evaluate genetic and functional characteristics of the resources. Finally, the appropriate meso-scale level schemes are developed in order to link international, national, and local ABS activities and institutions in the era of digital information.

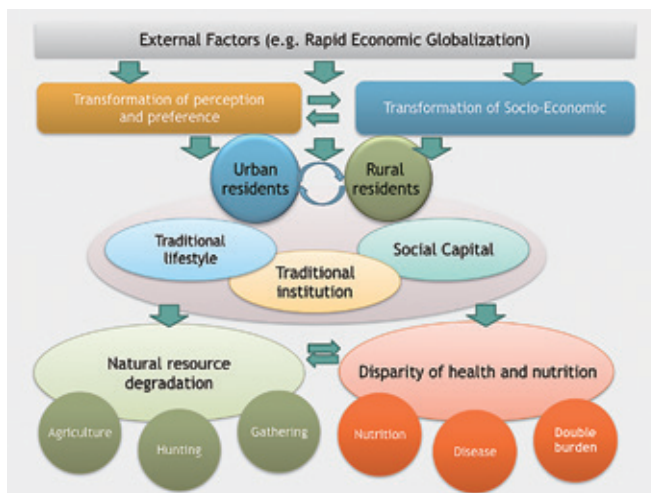


Proposed meso-scale scheme based on co-design and co-production

FS Transformation and Reconstruction of Agri-Cultural Diversity in Southeast Asia
MATSUDA Hirotaka, Tokyo University of Agriculture

Area : South East Asia

Environmental degradation associated with modern societies has been based on culture and institutions that reflect the incentives of these societies. Naturally, culture and institutions have been dynamically transformed. The purpose of this research is to examine the East Asian historical experience of poverty, disparity of health, and utilization of natural resources, including agriculture, in order to reveal the significance of change in Asian institutions and cultural diversity and contribute to the construction of sustainable East Asian societies.



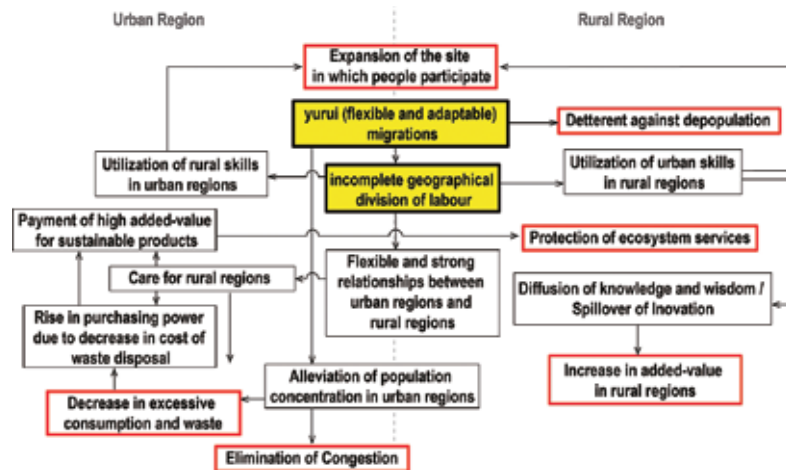
Research framework of the research

Developing Interactive Rural-Urban Systems to Improve Human Well-being: Migration for Humanity and Nature

MORI Koichiro, Shiga University

Area : Jakarta and Medan in Indonesia, Sabae, Umajimura, Kurihara, Noto and Toyooka in Japan

The purpose of this research is to develop interactive urban-rural systems that can address global environmental problems and enhance human well-being within global environmental limits. The project investigates our hypotheses that the incomplete geographical division of labour between urban and rural areas and flexible and adaptable (yurui) migrations between urban and rural areas can provide strategies to abate problems related to urban overcrowding. The project will conduct social practical experiments.



Two key concepts, incomplete geographical division of labour and yurui migrations, can address environmental, economic and social problems through interactions of people between urban and rural areas.

Future Image of Living Sphere by Restructuring Sustainable Relation between Humans and Land

OKABE Akiko, Graduate School of Frontier Sciences, the University of Tokyo

Area : Informal settlements in Latin American countries

Slums have emerged as a consequence of socio-economic globalization and are frequently associated with land informality.

By questioning the land property as individual 'right', this project attempts to propose how to increase tenure security at neighborhood level through introducing the land possession as collective 'responsibility' to maintain properly the distributed land plots to individuals. The target project research areas are informal settlements in Latin American countries. We strategically introduce community engagement projects to explore the possibility of the scattered living sphere at neighborhood level and through generations. Such idea is inspired by the informal community logic that might have also links to the Andean pre-modern knowledge.



Workshop with local people sharing knowledge about the neighborhood, Barrio Cantera, an informal settlement with land slide risk in San Martin de los Andes, Argentina, October 2017.