

# Current Feasibility Studies

## Lifeworlds of Sustainable Food Consumption and Production: Agrifood Systems in Transition

Initiative-based FS

Steven R. MCGREEVY, RIHN

How can we create ecologically and socially sustainable agrifood systems? Taking a bottom-up, action research approach, this project seeks to initiate sustainable agrifood transition through the creation of new communities of social practice and collective action with stakeholders ranged along global and local food chains, at locations in Japan, China, Thailand, and Bhutan. Novel methodological approaches including participatory foodshed mapping and social practice backcasting will be employed, and consumer-oriented tools will be developed (food LCA app, local eco-brand).

Area : Japan, China, Thailand, Bhutan

\* This project will be converted to PR status in mid-2015.



Photo Upper left- Bhutanese agricultural landscape; Upper right- Children's food literacy education (Japan); Lower left- Consumer food cooperative (Holland); Lower right- Farmers and researcher workshop (China)

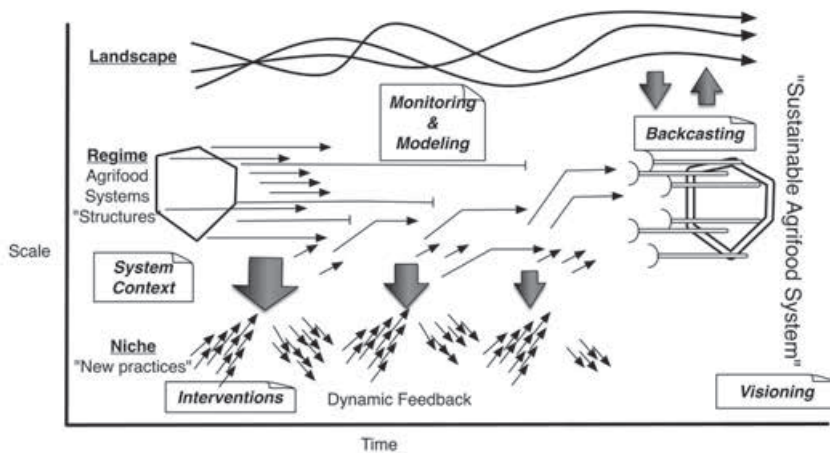


Figure Research activities as part of a transition process (adapted from Geels and Schot 2007). Niche-scaled practices interact with higher level techno-political structures, established cultures, and configurations of power, and are constrained, enabled, and evolve over time. Durable practices have the potential to reconfigure prevailing regimes (such as political, technological, or market orientations) as well as slow-changing social and cultural institutions and values.

## Integrative Study on the Linkage of Agricultural Activities and Environmental Degradation through Systematic Analysis, Research and Improving Practices, and Reintegration

Individual Collaboration FS

FUNAKAWA Shinya, Kyoto University

In the proposed project, an analysis will be performed to gain a more systematic understanding of the environmental problems that occur due to human agricultural activities (Figure). Next, an attempt will be made to lessen these problems through individual theoretical and practical research. Finally, the results obtained in the individual case studies will be integrated in order to construct comprehensive countermeasures and to develop strategies to address the environmental problems.

Area : Laos, Indonesia, Tanzania, Kazakhstan, Japan and others

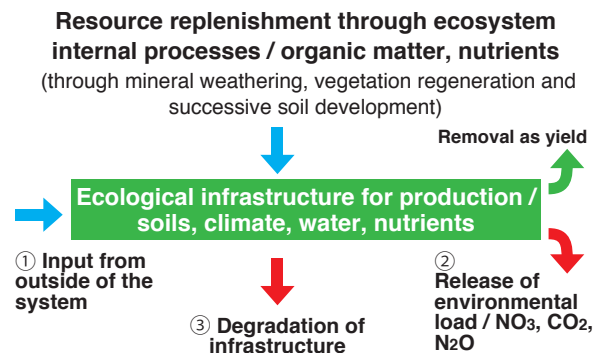


Figure Basic scheme for understanding resource utilization in agricultural practices and related environmental problems

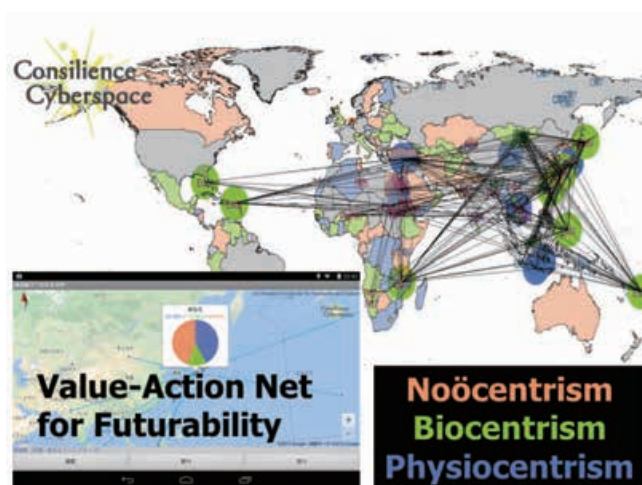
## Co-Creating Heuristic and Autonomous Risk-Recognition System and Value-Action Networking for Futurability

HANDOHI Itsuki C., RIHN

Initiative-based FS

We aim to examine and design environmental norms and governance to live with 'Chemical Imbalance Manifested as Environmental Risks in the Anthropocene (CHIMERA)' in peace. CHIMERA encompasses transboundary environmental problems such as chemical pollution and global warming, and the fears and benefits of chemicals have forced humanity to take very anthropocentric adaptations, namely environmental litigations and formulations of international regulations. Global-scale paradigms such as Planetary Boundaries and Global Catastrophic Risk are less transparent to local stakeholders, hence here is a dissociation between localism and globalism. Largely using our Android/iOS app, 'Value-Action Net for Futurability', we develop a heuristic and autonomous risk-recognition system, to which global monitoring and modelling of CHIMERA and its associated environmental litigations, movements, laws, and values are integrated. This will be the first real test for a wide spectrum of stakeholders (including more than 100,000 app users) to co-create novel global environmental values to complement current international regulations for chemical pollution preventions, and to inaugurate unprecedented, global-scale societal transformation towards futurability.

Area : Globe



Our Android/iOS app, 'Value-Action Net for Futurability' is a terminal to 'Consilience Cyberspace', a cyber platform embodying a co-creation between science and society towards a unity of knowledge for futurability that helps identify the environmental values and risk-recognition network transformation among a large indefinite number of stakeholders.

## Local Standard in Globalization : Social Inclusive Approaches towards Transformation of Local Communities

KAJITANI Shinji, The University of Tokyo

Individual Collaboration FS

This project will investigate the possibility of pluralistic society by creating *local standards*, i.e. specific local values, which have far-reaching generality. For this purpose, we utilize the *inclusive approaches* consisting of *dialogue, survey, design and investment*, where people can recognize the differences among themselves while having empathy for each other. We hope to rebuild local communities and to link our practice with the construction of theory of décentralisation.

Area : Japan (Kumamoto, Fukushima, etc.) and East Asia



Photo 1 The main building of Kuimaru Primary School, built in the deep mountainous area of Fukushima Prefecture in 1937 and closed in 1980. The local assembly decided to keep it from destruction at the end of 2014 after receiving many requests from inside and outside of the village.

Photo 2 OCICA, a new brand of jewelry made in an area affected by the 2011 Tohoku earthquake. We consider it a good model for our project, which attempts to create local standards by combining dialogue, survey, design, and investment. (photo: NOSIGNER)



## Food Sovereignty, Sustainable Agriculture and Fukushima Contamination

KANEKO Nobuhiro, Yokohama National University

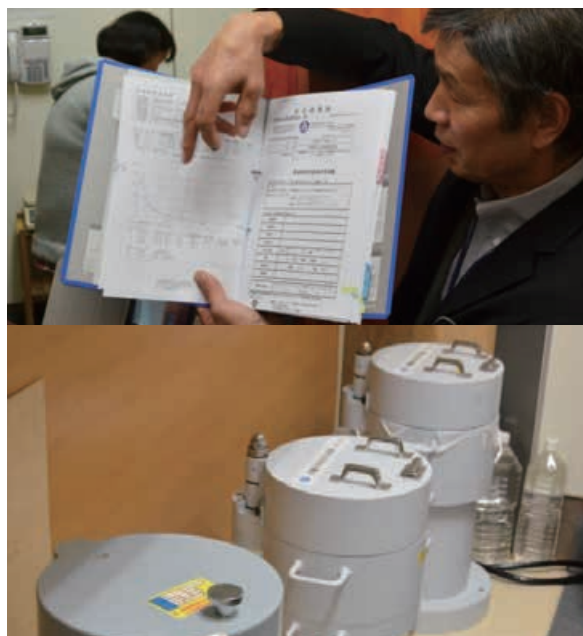
Individual Collaboration FS

Our lives are supported by the global economy, and food is no exception. Agriculture in the Fukushima area has been seriously affected by the Fukushima nuclear accident. Actions taken to control radio-caesium crop contamination were very successful, but consumers still hesitate to purchase foods produced in Fukushima. Chemical fertilizers used in intensive farming systems reduce micronutrients such as zinc and selenium, and as a consequence crops produced under such management regimes are not always good for human health. Is it therefore possible to compare the risks posed by radiological contamination with those of intensive farming?

This project examines cropland nutrient pool and budgets and evaluates radio-caesium contamination of food. Comparing conventional, organic and conservation farming methods, we will propose the scale of system that allows farmers and consumers to maintain effective nutrient cycling and reliable relationships based on food and energy sovereignty.

Area : Japan

Photo 1 Farmers learn about levels of cesium present in their products.  
Photo 2 Farmers bought this device capable of measuring cesium.



## Toward the Regeneration of Tropical Peatland Societies: Establishment of an International Research Network and Proposals for the Future

MIZUNO Kosuke, Kyoto University

Institutional Collaboration FS

This project focuses on global environmental issues relating to tropical peat swamp forest, a very fragile ecological system which stores huge amounts of carbon and water. The purpose of this project is to offer perspectives for the “futurability” of tropical peat land society by discussing and implementing appropriate, concrete methods to conserve and utilize the peat swamp. Project research pays marked attention to the ecological and social characteristics of the particular area and local peoples, and reflects such information in the proposal.

Area : Tropical peat swamp forests and degraded areas, Southeast Asia

Photo 1 'Don't make forest fires' warns this sign. After repeated burning, this state forest area has become a low shrub land.

Photo 2 Our FS collaborated with the local community to build this simple dam used for rewetting peat soils and preventing them from burning.





Above: KUSAKA Soichiro, The David Sheldrick Wildlife Trust, Kenya  
Bottom: OSHIUMI Keiichi, A boy is delighted with a morning squall, Cambodia





Above: ENDO Hitoshi, Walking in a golden field, India  
Left below: OMOTO Reiko, Great storage, Ho Chi Minh, Vietnam  
Right below: WATANABE Kazuo, Silent beach, Thailand