Trans-system, unified approach for global and regional integration of social-ecological study toward sustainable use of biodiversity and ecosystem services (TSUNAGARI)

Call:

Scenarios of Biodiversity and Ecosystem Services

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TSUNAGARI (meaning connectivity and relationship in Japanese) aims to build an international network of researchers to link knowledge to action for the sustainable use of biodiversity and ecosystem services in Asia.

The project consists of 4 main objectives:

- Establishing methodologies to integrate fine-resolution spatial information of ecosystems to broad-scale database
- Examining and understanding scale-dependency in the effects of multiple human-induced drivers on the variability in biodiversity and multiple ecosystem services, and in the decision-making processes of biodiversity and multiple ecosystem services used by societies at various levels
- Evaluating the importance of ecosystem connectivity (from forest to marine ecosystems) on the variability and changes in biodiversity and multiple ecosystem services, and investigating its effects on interactions among local communities at different sites within a watershed, and on their decision-making;
- Developing new indicators and models for scenario analysis to achieve sustainable biodiversity and multiple ecosystem services use based on feedbacks between ecological and socioeconomic sciences using outputs of above-mentioned objectives.

The research group consists of well-balanced teams of scientists from different regions and disciplines. These range from ecologists studying forest, riverine and coastal biodiversity and ecosystems, environmental scientists conducting broad-scale analyses of biodiversity and land/sea use changes, environmental socio-economists studying global impact of human activities on earth environment, and environmental anthropologists studying human relationships and behavior in relation to sustainable social systems.

During the project period, we will have three workshops that will achieve our objectives sequentially, alongside which we will establish several model study sites in Japan, China and Southeast Asia to share and develop ideas for leveraging research on sociological-ecological systems and ecosystem connectivity with local stakeholders and decision-makers.