

Resilience study presumed upon non-symmetrical relationship between ecological and social systems

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Many scholars have insisted that synthesis of ecological and social resilience is necessary. However, because of methodological difficulty, synthetic theory is still uncertain and controversial.

One of the reasons of this difficulty lies in non-symmetrical relationship between ecological and social systems. The process of social reaction to ecological change is not same as that of ecological reaction to social change. The reaction of social system to ecological change is not paralleled to that of ecological system to social change.

Some of key factors that govern social resilience when they confront with ecological hazard for example are adaptability, learning capacity and self-organizing capacity. On the other hand, the key factors that function to govern resilience of ecological system are diversification, redundancy and flexibility. This difference in governing process in social and ecological process has reflected to the discord between social scientists and ecologists. The former inclines to think social system changeable and the latter may presume ecological system symbiotic.

Thus unequal relation between social system and ecological system suggests that the study of resilience of social and ecological system can be studied separately according to specificity of each system. The consolidation of social and ecological resilience should be pursued in such a way that key factors that govern resilience of social system should be re-examined from the view point of ecological resilience. We have to ask whether the adaptability, learning capacity and self-organizing capacity that function to keep resilience of social system do also act to protect ecological resilience. But this should be done after separate studies for ecological and social systems. Otherwise the resilient study of ecological and social system can't be viable.