

Resilience and Social Learning Within Networks

The term resilience has gained great prominence within the climate change debate, but only since recently, *knowledge and learning* are being discussed as influencing factors for resilience (Folke et al. 2005, Adger et al. 2005, Biermann 2009). Furthermore, there is little understanding about how these concepts are linked. The first aim of the paper will be to detect and present elements of social learning within existing research approaches. While there are some remarkable leadoff contributions (Pelling and High 2005; Hertin et al. 2005), approaches investigating the connection of learning processes and adaptiveness are still rare and in an early stage of development. Furthermore, it is yet barely understood how adaptation related knowledge is created.

Likewise, within network theories, the discussion about the role of learning for advancing sustainability has just been sparked off. Recently, numerous attempts of stakeholders who created *ecosystem management networks* (Manring 2007) have been examined. (Manring 2007) argues they can be understood as “virtual learning organization(s)”. However, the question whether and how networks can contribute to *resilience* towards climate change stressors has not been addressed sufficiently yet.

The paper develops a novel approach towards conceptualising *resilience learning* that draws on both dimensions, adaptation and social learning. It uses the double-loop learning concept within the environmental sphere, since the values and beliefs human actions are based on have to be challenged. The predominant questions this paper focuses on are:

- What elements of social learning have been used in resilience concepts so far?
- What are the processes and dynamics of *resilience learning* and how can they be intensified and/or accelerated?
- What role can networks play within resilience learning processes?
- What is the relationship between an actor's, a network's and a region's resilience?