Adaptive Capacity of Social Systems: Exploring the Differences between Community, Landscape, and Legal/Institutional Frames

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Building the knowledge to enhance the adaptive capacity of social systems in the context of environmental change is critical to social-ecological resilience. One element of resilience is the degree to which the system can build and increase its capacity for learning and therefore adaptation. This presentation will discuss the different understandings of adaptive capacity from a human community, landscape, and institutional perspective presented by the other panel members. This discussion will address the adaptive characteristics and capacity of knowledge and information systems for building social-ecological resilience in the face of complexity and uncertainty. It raises several questions for discussion among them: How can a complex, dynamic social-ecological system acquire and manage information at multiple scales? What makes some knowledge systems more or less adaptive to emergent properties of systems at different scales? How do we balance traditional top-down hierarchical management, built on vertical lines of authority, with emergent, context dependent, and often informally organized social networks of actors, stakeholders, and governmental and nongovernmental organizations interconnected by horizontal lines of interaction?