Sustainability Science Award
Thomas Dietz, Elinor Ostrom, and Paul Stern

The Sustainability Science Award is given annually to the authors of the peer-reviewed paper published in the past 5 years that makes the greatest contribution to the emerging science of ecosystem and regional sustainability through the integration of ecological and social sciences. Unprecedented directional changes in climate, human population, technology, and social and economic institutions are altering the structure and functioning of current ecological and social systems. The Sustainability Science Award recognizes the role that science can play in addressing these challenges.

The subcommittee has selected Thomas Dietz, Elinor Ostrom, and Paul Stern as the 2005 Sustainability Science Award winners for their paper, “The struggle to govern the commons,” published in Science in 2003. Thomas Dietz is Director of the Environmental Science and Policy Program and Associate Dean of Environmental Science and Policy. Elinor Ostrom is with the Center for the Study of Institutions, Population, and Environmental Change at Indiana University, and Paul Stern is at the Division of Social and Behavioral Sciences and Education at The National Academies in Washington.

This paper provides a groundbreaking synthesis of key concepts from the emerging science of human–environment interactions, linking human institutions to sustainable management of the commons. The challenge they present is to create adaptive governance structures that can link globalization trends with local and regional needs. To meet this challenge, the authors demonstrate how a mix of human institutions (public and private), each operating at different scales, will need to be used in the 21st century to achieve sustainability. In doing so, the authors provide a suite of testable requirements for adaptive commons governance in complex systems, thus setting the stage for new and innovative research in the field of sustainability science.