The Knowledge Systems for Sustainable Development (KSSD) Project seeks to understand and promote the design of effective systems to harness research-based knowledge in support of decisions bearing on the joint goals of human development and environmental stewardship – i.e., on goals of sustainability. "Knowledge systems" are viewed as consisting of a network of linked actors, organizations, and objects that perform a number of knowledge-related functions (including research, innovation, development, demonstration, deployment, and adoption) that link knowledge and know-how with action. Included in this concept are the incentives, financial resources, institutions and human capital that give such systems capacity to do their work, and the intention to focus such work in some arenas rather than others. The "kinds" of knowledge include "formal" knowledge produced by the natural and social sciences, "clinical" knowledge found in engineering and medicine, and "tacit" knowledge of practitioners. There is no presumption that "knowledge systems" are the result of some master design. But we do assume that such systems, however they came into being, can be at least partially understood and manipulated in ways that improve their performance.

Our over-arching and long-term goal is to promote the development of more effective systems for harnessing research-based knowledge for sustainability. In pursuit of this goal, the project addresses three over-arching questions regarding the relation between knowledge and sustainable development:

- What are the characteristics of effective knowledge systems?
- How does the effectiveness of such systems depend on social and environmental contexts?
- How can knowledge systems be made more effective in specific circumstances?

The project has identified four bodies of evidence and nine hypotheses or propositions relevant to the question, w*hat makes some knowledge systems more effective than others in harnessing science and technology to the goals of sustainable development?* The project is evaluating how generalizable findings about knowledge systems might be. We begin with the premise that usable knowledge is ultimately "contextualized," i.e., adapted to specific circumstances of place. The question remains, however, of what (if any) generalizations about "what works" in the design of effective knowledge systems can be carried over from place to place, or sector to sector, or problem to problem. To answer this question, the project is exploring four different bodies of evidence at four different scales of resolution: detailed studies of comparative knowledge systems for *coastal zone management* focused on shrimp farming in Thailand and Mexico; slightly courser but more broadly comparative work on efforts to *apply seasonal to interannual climate forecasts*; broad *sectoral comparisons* of R&D systems for agriculture, health, energy, etc.; and an equally broad *place-based* comparison of R&D systems focusing on a range of *land-degradation syndromes* in Latin America. The nine hypotheses or propositions developed to date address: solutions, tacit knowledge, co-production, integrated impact assessment, learning, salience, credibility and legitimacy, scale, boundary organizations, and contextualized design.

The project began in Fall 2003 as a collaborative endeavor involving scholars from Harvard University, Chiang Mai University, Stanford University, and the Economic Commission for Latin America and the Caribbean. It is housed at the Kennedy School of Government within Harvard's Center for International Development with an Executive Committee consisting of William Clark (Director), Nancy Dickson (Executive Director), Gilberto Gallopín, Louis Lebel, and Pamela Matson. For more information see http://www.ksg.harvard.edu/kssd .