



Center for International Development
at Harvard University

Sustainability Science Program

“Sustainability science” is problem-driven, interdisciplinary scholarship that seeks to facilitate the design, implementation, and evaluation of effective interventions that foster shared prosperity and reduced poverty while protecting the environment. It is defined by the problems it addresses rather than the disciplines it employs. It thus draws as needed from multiple disciplines of the natural, social, medical and engineering sciences, from the professions, and from the knowledge of practice.

The Sustainability Science Program at Harvard University’s Center for International Development works to advance scientific understanding of human-environment systems; to improve linkages between relevant research and innovation communities on the one hand, and relevant policy and management communities on the other; and, more broadly, to build capacity for linking knowledge with action to promote sustainability. The Program was launched in September 2006. Our goal is to establish as a vibrant field of problem-driven research contributing to the common interest, similar to the fields of agricultural science and health science. We intend that Harvard’s Sustainability Science Program will be recognized around the world as a central node in the international network of scholars and practitioners that constitute the field.

Program Activities

The Sustainability Science Program supports major initiatives in policy-relevant research, as well as competitive awards for individual faculty research, curriculum development and fellows training. A group of 33 faculty and lecturers from six schools are the core of the Program’s Faculty. These faculty have either received a grant from the Program or have agreed to host a fellow. See http://www.cid.harvard.edu/sustsci/faculty_affiliates.html.

Major program initiatives in policy-driven research: The Program seeks to develop a major new initiative each year focused on a current policy challenge of sustainable development. Initiatives include biofuels and globalization (2007-09) and water and development (2008-10). Plans are underway to launch a third initiative on agriculture/land use-land cover (2009-11).

Competitive faculty grants: Competitive faculty grants for research in sustainability science are intended to seed new research related to the core concerns of sustainability science. Proposals by Harvard faculty to explore sectoral applications of sustainability science in the areas of agriculture, habitation, energy and materials, health and water are encouraged, as are applications to integrated regional development. The deadline for applications is February 1, 2009. See <http://www.cid.harvard.edu/sustsci/grants/faculty>.

Teaching: Building capacity for better research and research-based policy in support of sustainable development is a central goal of the Program. In particular, we are creating and will make broadly available to the international community a reader, book, and curriculum on sustainability science that can be used for teaching.

Fellows training and capacity development: The Program hosts an international fellows' competition that brings 15-20 doctoral and post-doctoral students as well as practicing mid-career professionals to Harvard for one to two semesters each year. Our goal is to build a network of fellows and collaborators that will substantially augment the human capacity necessary to promote science-based sustainable development and prosperity around the world. Candidates compete for a fellowship by submitting a research project proposal. If admitted they integrate their proposal with existing Harvard efforts, refine the proposal, meet regularly with their faculty host, and report out on their work twice a year in a seminar of their peers. There are 19 fellows in the 2008-09 cohort of fellows representing 12 nationalities. The "Giorgio Ruffolo Fellows in Sustainability Science" support 10 research fellowships per year. The Empedocle Maffia Fellowship program provides tuition and stipend for two Italian masters' degree students to study at the Kennedy School. See <http://www.cid.harvard.edu/sustsci/grants/fellows>.

Outreach activities: Outreach activities are focused on recognition of the field of sustainability science by scientific academies and professional institutions, development organizations, research centers and other universities around the world. Especially active are links with U.S. National Academy of Sciences, the Bureau for Research and Economic Analysis for Development, the Academy of Sciences for the Developing World, the Consultative Group on International Agricultural Research, and the American Association for the Advancement of Science and its Forum on Science and Innovation for Sustainable Development, www.sustainabilityscience.org. The prestigious *Proceedings of the National Academy of Sciences* has formally established a section along side of "physics" and "genetics" where it is now possible to publish top quality papers in sustainability science for which Bill Clark is section editor. An annual series of workshops and study sessions on policies related to the Grand Challenges of the Sustainability Transition are organized by the Sustainability Science Program and hosted by Venice International University. See <http://www.cid.harvard.edu/cidwp/pdf/174.pdf>.

Program Sponsorship

The Sustainability Science Program's core support is provided by Harvard's Center for International Development and a generous gift from the Italian Ministry for Environment, Land and Sea. Additional project-specific funding comes from a variety of federal agencies, private foundations, and Harvard sources.

At Harvard

At Harvard, the Program's work lies at the intersection of the University's Center for Environment (HUCE), its Center for International Development (CID), the multidisciplinary initiative in Science and Innovation anchored at the Center for Science and International Affairs (BCSIA), and the School of Engineering and Applied Sciences (SEAS). Internationally, we collaborate with and are called upon to guide emerging programs in governments, global research centers, and scholars.

Program People

The Program is directed by William C. Clark (Harvey Brooks Professor of International Science, Public Policy and Human Development, Kennedy School of Government) and Nancy Dickson (Senior Researcher, Kennedy School of Government). They are supported by a steering group of Harvard faculty: Merilee Grindle, Missy Holbrook, John Holdren, Calestous Juma, Michael Kremer, Rohini Pande, Daniel Schrag and an Advisory Committee chaired by CID Director Ricardo Hausmann. See http://www.cid.harvard.edu/sustsci/steering_group.html.

For more information visit the web site at www.cid.harvard.edu/sustsci or contact nancy_dickson@harvard.edu.