Science, Environment and Development Group Members
2005-2006

Arun Agrawal, Visiting Scholar
Paul Anastas, Senior Research Fellow
Mary Anne Baumgartner, Faculty Assistant
Jeff Bielicki, Pre-doctoral Research Fellow
William Clark, Professor, SED Group Co-Director
Nancy Dickson, Senior Research Associate, SED Group Co-Director
Kristen Eddy, Manager of Collaboration Technologies
Kate Emans, Pre-doctoral Research Fellow
Robert Frosch, Senior Research Associate
Sakiko Fukuda-Parr, Research Fellow
Kelsey Jack, Pre-doctoral Research Fellow
Carolyn Kousky, Pre-doctoral Research Fellow
Kira Matus, Pre-doctoral Research Fellow
Erik Nielsen, Pre-doctoral Research Fellow
Nancy Odeh, Pre-doctoral Research Fellow
Nora O'Neil, Project Coordinator
Smita Srinivas, Associate
Nicole Szlezák, Research Fellow
Raghu Tata, Visiting Scholar
Juan Carlos Vargas-Moreno, Pre-doctoral Research Fellow
Juergen Weichselgartner, Research Fellow

Arun Agrawal, Visiting Scholar
Arun Agrawal is a Visiting Scholar at Harvard’s Center for International Development and an Associate Professor at the University of Michigan's School of Natural Resources and the Environment. His research focuses on the political economy of conservation and development. He teaches environmental politics. He publishes on indigenous knowledge, community-based conservation, decentralization of environmental policies, and environmental identities. Research under way includes: a comparative study of environmental policy decentralization (forestry and wildlife) in the developing world; the relationship between environmental equity and sustainable governance; and investigating the role of institutions in enhancing sustainable governance of forests in the Himalaya.

Paul Anastas, Senior Research Fellow
Paul Anastas is a Senior Research Fellow at Harvard’s Center for International Development, Director of the Green Chemistry Institute in Washington, D.C., and a Roy Fellow at the Environment and Natural Resources Program at Harvard's Kennedy School of Government. He was Assistant Director for Environment at the White House Office of Science and Technology Policy (OSTP) from 1999-2004 where his responsibilities covered a wide range of environmental science issues including furthering international public-private cooperation in areas of science for sustainability such as Green Chemistry. Anastas served as the Chief of the Industrial Chemistry Branch of the U.S.

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Environmental Protection Agency (EPA) from 1989-1998. During that period he was responsible for regulatory review of industrial chemicals under the Toxic Substances Control Act and the development of rules, policy and guidance. In 1991, he established the industry-government-university partnership Green Chemistry Program, which was expanded to include basic research, and the Presidential Green Chemistry Challenge Awards. Prior to joining the EPA, he worked as an industrial consultant to the chemical industry in the development of analytical and synthetic chemical methodologies. Anastas received his MA and PhD in Organic Chemistry from Brandeis University and his BS in Chemistry from the University of Massachusetts at Boston.

Mary Anne Baumgartner, Faculty Assistant
Mary Anne Baumgartner is faculty assistant to Professor William Clark, Nancy Dickson, and the Science, Environment and Development Group at Harvard's Kennedy School of Government. She has supported the Sustainability Science project and the Initiative on Science and Technology for Sustainability. Baumgartner assists with event and meeting coordination. Prior to coming to the Kennedy School she worked in marketing and communications for architects and engineers in the USA and the UK. In addition to her interests in the arts, the environment, and the built environment, she is involved in alumni activities for Milton Academy and Bennington College where she received a BA in History.

Jeff Bielicki, Pre-doctoral Research Fellow
Jeff Bielicki is a Research Assistant in the Department of Earth and Planetary Sciences, a Research Fellow with the Science, Environment and Development Group at the Center for International Development, and an affiliate of the Energy Technology Innovation Project at the Belfer Center for Science and International Affairs, all of which are at Harvard University. He is a PhD candidate in the Public Policy Program at Harvard's Kennedy School of Government where his research interests include engineering systems, environmental systems, complex systems, and game theory, with specific applications to the organization of social systems. He is investigating how fossil-fueled electricity generation should be organized when carbon capture and storage is included as an operational necessity. He is a recipient of the Crump Fellowship and was a Santa Fe Institute Research Scholar. Before coming to Harvard, he was a mechanical engineer at the Laboratory for Laser Energetics at the University of Rochester and the Fermi National Accelerator Laboratory. He has published on solar energy and antiproton production. He is a member of Tau Beta Pi (Engineering Honor Society), Sigma Xi (Scientific Research Society), the Society of Industrial and Applied Mathematics, and the American Society of Mechanical Engineers. He earned a degree in mechanical engineering from Valparaiso University (Indiana), an MBA from the University of Chicago, and an MPA from Harvard University. In his free time, he improvises.

William Clark, Co-Director
William C. Clark is the Harvey Brooks Professor of International Science, Public Policy and Human Development at Harvard University’s Kennedy School of Government. His research focuses on the interactions of environment, development and security concerns in international affairs. Clark serves on the scientific advisory committees for the
Initiative on Science and Technology for Sustainability (ISTS) and the International Institute for Applied Systems Analysis (IIASA). He is co-author of *Adaptive Environmental Assessment and Management* (Wiley, 1978) and *Redesigning Rural Development* (Hopkins, 1982); editor of the *Carbon Dioxide Review* (Oxford, 1982); and co-editor of *Sustainable Development of the Biosphere* (Cambridge, 1986), *The Earth Transformed by Human Action* (Cambridge, 1990), *Learning to Manage Global Environmental Risks* (MIT, 2001), *Global Environmental Assessments* (MIT, 2006), and *Environment* magazine. He also serves as Associate Editor of the *Proceedings of the National Academy of Sciences* (PNAS). Clark co-chaired the recent study by the U.S. National Research Council on *Our Common Journey: A Transition Toward Sustainability* (NAP, 1999) and the recent Heinz Center study, *The State of the Nation’s Ecosystems: Measuring the Lands, Waters, and Living Resources of the United States* (Cambridge University Press, 2002). With Nancy Dickson, Clark co-directs the Science, Environment and Development Group at Harvard’s Center for International Development (CID). Clark is a member of the U.S. National Academy of Sciences, and a recipient of the MacArthur Prize, the Humboldt Prize, and the Kennedy School's Carballo Award for excellence in teaching. Clark trained as an ecologist at Yale University (BS) and the University of British Columbia (PhD).

**Nancy Dickson, Co-Director**

Nancy Dickson is a Senior Research Associate at Harvard’s Center for International Development and co-directs the Science, Environment and Development Group. Her work focuses on understanding why the gap between what decision makers want from science and technology, and what science and technology is offering to decision makers persists, and what changes in institutions, procedures, and program design can help narrow this gap. She has managed international, interdisciplinary research projects at Harvard’s Kennedy School of Government since 1991. She is Executive Director of the Knowledge Systems for Sustainable Development Project, an effort to promote systems that use research and development work in support of problem solving and decision making activities for sustainable development. From 2000-2003 she was Executive Director of the Sustainability Science Project that sought to understand the coupled human-environment system, and set forth both new research agendas for sustainability science and interactions between scholars and practitioners (*PNAS* 100, 2003). From 1995-2001 she was Executive Director of the Global Environmental Assessment (GEA) Project. Her research on the long-term evolution of social responses to global environmental change was published in *Learning to Manage Global Environmental Risks* that she also co-edited (Social Learning Group, MIT Press, 2001). She trained as a regional planner at Cornell University.

**Kristen Eddy, Manager of Collaboration Technologies**

Kristen Eddy is Manager of Collaboration Technologies for the Science, Environment and Development Group and Manager of Web Communications and Publications for Harvard’s Center for International Development. She facilitates the use of collaborative technologies for physically distributed research teams. This involves synchronous technologies such as videoconferencing, web conferencing, and audio conferencing, and asynchronous technologies such as web sites, discussion forums, and listservs. She is
Project Manager for an interactive video project that is using asynchronous video technology to bring voices of stakeholders from a small agricultural community in Northern Thailand into the classroom as part of an internationalization of the case method. She has worked on the Knowledge Systems for Sustainable Development Project, the Sustainability Science Project, and the Global Environmental Assessment Project. Through her work with the Initiative on Science and Technology for Sustainability, she helped to create the Forum on Science and Technology for Sustainability, serving as Webmaster and Managing Editor. Previously she was Manager of Electronic Media Services for the Belfer Center for Science and International Affairs at Harvard's Kennedy School of Government. She also worked with Harvard's Environmental Information Center and the University. She has a BA from Harvard in Environmental Science and Public Policy.

Kate Emans, Pre-doctoral Research Fellow
Kate Emans is a Pre-doctoral Research Fellow at Harvard’s Center for International Development and at the Environmental Economics Program at Harvard University. She is a PhD candidate in the Program in Political Economy and Government, which is jointly supported by the Kennedy School of Government, the Economics Department, and the Government Department. She tries to understand how institutions and policies affect the economic choices of users of common property natural resources including water and forests. Her work focuses on how protected area policies for forest conservation affect economic growth at the household and local level. She has worked as a researcher for non-profit organizations, including the Water and Development Group of the Stockholm Environment Institute-Boston, and Verité, an organization that monitors labor rights and working conditions in emerging markets. She taught science and geography for a year in Chiang Mai, Thailand, and worked in business as a researcher for the Piper Jaffray Social Equity Investment Group. Emans is a recipient of the James and Cathleen Stone Fellowship in Environmental Economics (2002) and a National Science Foundation Graduate Research Fellowship (2004). She holds a degree in Ecology and Evolutionary Biology from Princeton University and enjoys hiking and playing ultimate frisbee in her spare time.

Robert A. Frosch, Senior Research Associate
Robert A. Frosch is a Senior Research Associate at Harvard's Kennedy School of Government. He conducted research in ocean acoustics at Columbia and later served as Director for Nuclear Test Detection, and Deputy Director of the Advanced Research Projects Agency in the Department of Defense, Assistant Secretary of the Navy for Research and Development, Assistant Executive Director of the United Nations Environment Programme, Associate Director for Applied Oceanography of the Woods Hole Oceanographic Institution, Administrator of NASA, President of the American Association of Engineering Societies, and Vice President of General Motors Corporation in charge of Research Laboratories. He is a member of the National Academy of Engineering, the American Academy of Arts and Sciences, a Foreign Member of the UK Royal Academy of Engineering, and a fellow or member of a number of professional societies. He is a theoretical physicist by education (AB, Columbia College, '47 and PhD, Columbia University, '52).
Sakiko Fukuda-Parr, Research Fellow
Sakiko Fukuda-Parr is a Research Fellow at Harvard’s Center for International Development and the Science, Technology, and Public Policy Program at the Belfer Center for Science and International Affairs. She is writing a book on agricultural biotechnology and development with the support of a Rockefeller Foundation grant. For the period 1995-2004 she was the Director and lead author of the United Nations Development Programme’s Human Development Report; in this position, she expanded the intellectual frontiers of “human development” by exploring the policy choices in areas such as democracy, cultural diversity, and human rights. She was in charge of UNDP’s programmes in francophone West Africa and led policy work in Africa for aid coordination, including an initiative on the reform of technical cooperation for capacity development. At the World Bank she worked on agriculture and rural development projects in North Africa and the Middle East. She has written and spoken widely on a range of policy issues for human development from technology to human rights, gender, human security, global governance, aid architecture, and capacity development. She is a Japanese national and holds degrees from Cambridge University, the Fletcher School of Law and Diplomacy, and the University of Sussex.

Kelsey Jack, Pre-doctoral Research Fellow
Brooke “Kelsey” Jack is a Pre-doctoral Research Fellow at Harvard’s Center for International Development and a doctoral candidate in the Public Policy Program at Harvard's Kennedy School of Government. Her research interests focus on systems for valuation of ecosystem services, and the role these play in community decision-making and formulation of national policy in developing countries. Jack spent two years as a program officer with IUCN - The World Conservation Union in Lao PDR, where she worked on issues of conservation and rural livelihoods. She has also worked as a research intern for the World Resources Institute, for the Dean of New York University Law School, and for the Princeton Environmental Institute. Jack received her undergraduate degree in public and international affairs from Princeton University’s Woodrow Wilson School.

Carolyn Kousky, Pre-doctoral Research Fellow
Carolyn Kousky is a Pre-doctoral Research Fellow at Harvard’s Center for International Development and a doctoral candidate in the Public Policy Program at Harvard's Kennedy School of Government. As the current recipient of the Crump Fellowship, she is examining the use of auctions to award contracts for the provision of ecosystem services. Last year she conducted research for the H. John Heinz III Center for Science, Economics and the Environment on the U.S. experience with national indicators, identifying institutional lessons that could inform the development of a system of environmental indicators. She has published on municipal motivations for reducing greenhouse gases. Kousky received a BS, with honors, in Earth Systems from Stanford University.

Kira Matus, Pre-doctoral Research Fellow
Kira Matus is Pre-doctoral Research Fellow at Harvard’s Center for International Development and a doctoral candidate in the Public Policy Program at Harvard's
Kennedy School of Government. Her research focuses on the application of scientific and technical knowledge to the problem of sustainable development in emerging and high-growth urban areas. She received an SM in Technology and Policy from the Massachusetts Institute of Technology (MIT) in 2005. While at MIT, she was a research assistant in the Joint Program for the Science and Policy of Global Change. As a part of that group, she worked to quantify the economic impacts of the health effects of urban air pollution on the economies of the United States and China. She was a participant in the Alliance for Global Sustainability’s IPOS graduate student symposium in 2004 in Thailand. She co-led a group of high school students on ICEP – a service and exchange trip to Sweden and Russia in 2005. Matus is a 2003 magna cum laude graduate of Brown University where she earned an ScB with honors in chemistry.

**Erik Nielsen, Pre-doctoral Research Fellow**

Erik Nielsen is a Pre-doctoral Research Fellow at Harvard’s Center for International Development and in his third year of the doctoral program at the Department of Urban Studies and Planning’s Environmental Policy Group at the Massachusetts Institute of Technology. His field is environmental public policy with an emphasis on East and Southeast Asia. His research analyzes the role of non-governmental interests in the process of environmental policy formulation and implementation. He focuses on transboundary environmental governance in the Greater Mekong Sub-Region, with an emphasis on how local and transnational civil society actors can influence China's decision-making over transboundary natural resources management. Nielsen worked at the Food and Agriculture Organization of the United Nations in Rome from 1998-2003 where he was coordinator of the Community Forestry Unit's global conflict management programme and team leader of an FAO programme on natural resource conflict management for Ghana. He is a recipient of Canada's Social Sciences and Humanities Research Council Doctoral Fellowship and a member of the Martin Family Society of Fellows for Sustainability. He has a master's degree from Cornell University in International Development Communication, with a double minor in Adult Education and Latin American Studies, and an undergraduate degree from the University of Guelph in Natural Resources Management and International Development. He is a national of Canada.

**Nancy Odeh, Pre-doctoral Research Fellow**

Nancy Odeh is a Pre-doctoral Research Fellow at Harvard’s Center for International Development and a doctoral student in the Environmental Policy Group at the Massachusetts Institute of Technology’s Department of Urban Studies and Planning. She is interested in environmental governance in the Middle East with a focus on how policies and institutions affect national water governance. Odeh was a Research Associate with the Stockholm Environment Institute - Boston Center where she worked on projects related to civil society and sustainable development, and international climate change policy. She also worked for Environment Canada as a Policy Analyst with the climate change group. She is the recipient of Canada's Social Sciences and Humanities Research Council Doctoral Fellowship. Odeh has a BSc in Physical Geography from McGill University and a MSc in Environmental Change and Management from the University of Oxford.
Nora O’Neil, Project Coordinator
Nora O’Neil is a Project Coordinator with the Science, Environment and Development Group at Harvard’s Center for International Development. Her responsibilities include grant administration, financial management, and event planning. From 1996-2002 she was the Project Coordinator of the Harvard Information Infrastructure Project at Harvard’s Kennedy School of Government. O’Neil is a graduate of the Georgetown University School of Foreign Service as a concentrator in the Science, Technology and International Affairs Program with a Certificate in Russian Studies.

Smita Srinivas, Associate
Smita Srinivas is an Associate at Harvard’s Center for International Development and the Science, Technology, and Public Policy Program at the Belfer Center for Science and International Affairs. Her research is on comparative institutional and technological changes in the pharmaceutical and biotechnology sectors. Her work on industrial development focuses on skill development, innovation, heterogeneity of production systems, and local relevance and social valuation of industrial change. She has held various research, policy advisory and consulting positions, including with the United Nations, the International Labour Organization, and a range of grassroots organizations. In 2000-2001 she authored two books on social protections in heterogeneous industrial production systems. She was an UNIDO Fellow at the Kennedy School (‘04-05) and the Task Force Fellow with the UN Millennium Project’s Task Force on Science, Technology, and Innovation (‘02-04). She is a Research Affiliate with the MIT Industrial Performance Center where she has been active in the Local Innovation Systems project, as well as a Visiting Research Fellow with the Institute of Bioinformatics and Applied Biotechnology in Bangalore, India. She holds a BA in Mathematics and Physics from Smith College, an MS in Physics from Yale University, a Certificat d’etudes Internationales, Economics section from the Graduate Institute of International Studies in Geneva, and a PhD in Economic Development and Technology Planning from the Massachusetts Institute of Technology.

Nicole Szlezák, Research Fellow
Nicole Szlezák is a Research Fellow at Harvard’s Center for International Development and a PhD candidate in Public Policy at Harvard’s Kennedy School of Government. Her work focuses on the role of science and research in shaping health policy. Together with Lorrae van Kerkhoff, she is investigating the role of research-based knowledge in decision making at The Global Fund to Fight AIDS, Tuberculosis and Malaria, with a special focus on the Global Fund's projects in China. Prior to coming to Harvard, Szlezák was a clinical researcher at the Institute of Tropical Medicine in Tuebingen, Germany, and at the Albert Schweitzer Hospital in Gabon, where her work focused on malaria and schistosomiasis. Szlezák holds a medical degree from Humboldt University in Berlin, and a doctoral degree in medicine from the University of Tuebingen, Germany. She graduated from the Master in Public Administration Program at Harvard’ s Kennedy School of Government.
**Raghu Tata, Visiting Scholar**
Tata L. Raghu Ram is a Visiting Fulbright Scholar at Harvard’s Center for International Development and Assistant Professor at the Indian Institute of Management Calcutta’s Centre for Development and Environment Policy. His research focus is on community forestry, livelihoods and evaluation of forestry institutions in India. His work explores the environmental governance, policy, development, and environment interface. Tata has a master’s degree in limnology and PhD in biodiversity impact assessment. He teaches environment and natural resource management. He is co-editor of *Reconciling Environment and Economics* (IGIDR, Mumbai 2003) and editor of *Uttar Pradesh Environment Monitor-2003* (World Bank, New Delhi 2004). He was the Member Secretary and Project Coordinator of Environmental Economics Research Committee that sponsored 61 field research projects aimed to build environmental economics research capacity in India (2000-2003). He was National Project Coordinator of Protected Area Network Cell at the Wildlife Institute of India (1994-95). His publications cover habitat evaluation models, biodiversity impact assessment, water and air quality governance and environmental policy.

**Juan Carlos Vargas-Moreno, Pre-doctoral Research Fellow**
Juan Carlos Vargas-Moreno is a Pre-doctoral Research Fellow at Harvard’s Center for International Development and a doctoral candidate at Harvard's Graduate School of Design. He specializes in environmental planning with an emphasis on rapidly changing regions of developing countries. His research focuses on planning and analysis of spatially-explicit alternative futures scenarios for development and conservation by using computer modeling and principles of regional landscape planning to forecast land use and natural resources utilization. His doctoral research explores new approaches for bottom-up, community-based, scenario-driven planning as a mechanism to influence public policy and ensure sustainable livelihoods for communities in regions undergoing rapid conversion from rural to urban conditions. He has been a researcher for the Ministry of Environment and the National Park System of Costa Rica, the AVINA Foundation, and the Fundación Mexicana para la Educación Ambiental (FUNDEA). He is a recipient of Research Grants from the Ministry of Science and Technology of Costa Rica (2005) and the Harvard Design School (2004). He holds degrees in Architecture and Urban Design from University of Costa Rica and a master degree in Landscape Planning and Ecology from Harvard Design School.

**Juergen Weichselgartner, Research Fellow**
Juergen Weichselgartner is a Research Fellow at Harvard’s Center for International Development and holds a Feodor Lynen Fellowship from the Alexander Humboldt Foundation in Germany. His current research is on historical floods and social responses to past environmental changes. He will be contributing to the project “Vulnerability and Resilience in Practice,” led by Roger Kasperson at Clark University, as part of the larger project, Sustainability Science and Technology: Linking Knowledge with Action. Prior to this appointment, he worked at the University of Tokyo’s Graduate School of Frontier Sciences, the International Institute for Applied Systems Analysis, the University of Bonn’s Geomorphological and Environmental Research Group, and the University of Cantabria’s CITIMAC. Weichselgartner studied geography, political science, and
ethnology in Heidelberg, Malta, Santander and Bonn (MS 1997) and completed his PhD research (2001) at Bonn University with a system-theoretical analysis of the social discussion of natural risks. He has conducted research on human-environmental interactions, risk perception, disaster management, vulnerability, and systems theory. He is secretary of the International Geographical Union’s Commission “Hazards and Risks” (C-12). He has numerous publications, including *Der unruhige Planet: Der Mensch und die Naturgewalten* (with Richard Dikau, WBG, 2005).