ISHA RAY

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Current Position

Associate Professor | Energy and Resources Group | University of California at Berkeley Associate Professor | Geography | UC Berkeley Co-Director | Berkeley Water Center Faculty | UC Berkeley-UC San Francisco Joint Medical Program Faculty | Institute for South Asia Studies | UC Berkeley

Education

1997 PhD, Applied Economics, Food Research Institute, Stanford University
1985 MA, Food Research Institute, Stanford University
1983 BA, Philosophy, Politics and Economics, Oxford University

Research interests

Water and development; sanitation and development; technology and society.

Academic Activities

2002-2009	Assistant Professor, Energy and Resources Group, UC Berkeley
1999-2001	Ciriacy-Wantrup Postdoctoral Fellow, University of California, Berkeley
1997-1999	Postdoctoral Fellow, International Water Management Institute (IWMI).
2004-2013	Editorial Committee:

Annual Review of Environment and Resources

2006 -	Reviewer:Agricultural Water ManagementAmerican AnthropologistAnnals of American GeographersAmerican Journal of Tropical Medicine and HygieneEconomic Development & Cultural ChangeEnvironmental Research LettersEnvironmental Science & PolicyEnvironmental Science & TechnologyInformation Technology & International DevelopmentJournal of Asian and African StudiesJournal of Water, Sanitation and Hygiene for DevelopmentSocial Science and MedicineSpace and CultureThe Information Science
	The Information Society

Water Alternatives Water Policy Water Resources Research World Development

Professional Activities

2016-	Member, National Rural Water and Sanitation Standing Committee, China
2010-	Five Review Panels for National Science Foundation proposals on water, sustainable
	resource use, and small business opportunities in agriculture
2015-2016	Expert Group Meeting (Co-Chair), Women's Empowerment and Sustainable
	Development. UN Women
2013-2014	Expert Group Meeting (Speaker), World Survey on Women in Development. UN Women
2013-2015	Economic Advisory Panel, California Air Resources Board
2006-2013	Member, <i>Global Business Network</i> (<u>www.gbn.com</u>)
2005-	Water Portfolio Advisor, The Acumen Fund (<u>www.acumenfund.org/default.asp</u>)
2002-	Advisor, The Blue Planet Network (<u>http://blueplanetnetwork.org/</u>)
2002-2006	Senior Advisory Council, William Jefferson Clinton Service Corps Fellowship Program,
	American India Foundation
2001-2002	Consultant, Global Freshwater, The William and Flora Hewlett Foundation

Awards

2014	Indo-US 21 st Century Knowledge Initiative Award (PI of UCB-IITB team)
2006	Prytanean Faculty Award
2004	Hellman Family Faculty Fund Award
2003	Regents' Junior Faculty Fellowship

Books

Pranab Bardhan & Isha Ray (editors). 2008. *The Contested Commons: Conversations Between Economists and Anthropologists*, Malden and Oxford: Blackwell Publishing.

Peer-reviewed Publications

Water and Development

- Zachary Burt, Ayşe Ercümen, Narayana Billava & Isha Ray (2018). From intermittent to continuous service: Costs, benefits, equity and sustainability of water system reforms in Hubli-Dharwad, India. *World Development*, 109: 121 – 133. DOI: https://doi.org/10.1016/j.worlddev.2018.04.011
- Tanu Kumar, Alison E. Post & Isha Ray (2018). Flows, leaks and blockages in informational interventions: A field experimental study of Bangalore's water sector. World Development, 106: 149 – 160. DOI: https://doi.org/10.1016/j.worlddev.2018.01.022
- 3. Fermin Reygadas, Joshua Gruber, Lindsay Dreizler, Kara Nelson & Isha Ray (2018). Measuring user compliance and cost-effectiveness of safe drinking water programs: A cluster-randomized

study of household UV disinfection in rural Mexico. *American Journal of Tropical Medicine and Hygiene*. DOI: 10.4269/ajtmh.17-0440

- 4. Christopher Hyun, Alison E. Post & Isha Ray (2018). Frontline worker compliance with transparency reforms: barriers posed by family and financial responsibilities. *Governance*, **31**: 1 18. DOI 10.1111/gove.12268
- 5. Alasdair Cohen, Qi Zhang, Qing Luo, Yong Tao, John M Colford, Jr. & **Isha Ray**. (2017). Predictors of drinking water boiling and bottled water consumption in rural China: A hierarchical modeling approach. *Environmental Science and Technology*. DOI: 10.1021/acs.est.7b01006.
- Caroline Delaire, Abhijit Das, Susan Amrose, Ashok Gadgil, Joyashree Roy & Isha Ray (2017). Determinants of the use of alternatives to arsenic-contaminated shallow groundwater: an exploratory study in rural West Bengal, India. *Journal of Water and Health*, 15.5: 799 – 812. DOI: 10.2166/wh.2017.321.
- Emily Kumpel, Cleo Woelfle-Erskine, Isha Ray & Kara Nelson (2017). Measuring household consumption and waste in unmetered, intermittent piped water systems. *Water Resources Research*, 53: 302 – 315. DOI: 10.1002/2016WR019702.
- Zachary Burt, Robert M Njee, Yolanda Mbatia, Veritas Msimbe, Joe Brown, Thomas F Clasen, Hamisi M Malebo & Isha Ray (2017). User preferences and willingness to pay for safe drinking water: Experimental Evidence from Rural Tanzania. *Social Science and Medicine*, 173:63 – 71. http://dx.doi.org/10.1016/j.socscimed.2016.11.031
- 9. Susan Amrose, Zachary Burt & Isha Ray (2015). Safe drinking water for low-income regions. *Annual Review of Environment and Resources*, **40**:9.1 – 9.29.
- Alasdair Cohen, Yong Tao, Qing Luo, Gemei Zhong, Jeff Romm, John M Colford, Jr. & Isha Ray (2015). Microbiological evaluation of household drinking water treatment in rural China shows benefits of electric kettles: A cross-sectional study. *PLoS ONE*, 10(9): e0138451.
- Ayşe <u>Ercümen</u>, Benjamin F. Arnold, Emily Kumpel, Zachary Burt, **Isha Ray**, Kara Nelson, & John M. Colford, Jr. (2015). Upgrading a piped water supply from intermittent to continuous delivery and association with waterborne illness: A matched cohort study in urban India. *PLoS Medicine*, 12(10): e1001892.
- 12. Fermin Reygadas, Joshua S. Gruber, **Isha Ray** & Kara L. Nelson (2015). Field efficacy evaluation and post-treatment contamination risk assessment of an ultraviolet disinfection and safe storage system. *Water Research*, **85**: 74 84.
- Zachary Burt & Isha Ray (2014). Storage and non-payment: persistent informalities within the formal water supply of Hubli-Dharwad, India. *Water Alternatives*, 7: 106 120. [Also <u>reported</u> in the India Water Portal: <u>http://www.indiawaterportal.org/articles/does-24x7-water-supply-help-reduce-water-storage-or-hoarding-urban-areas]
 </u>

- 14. Carolina Balazs & Isha Ray (2014). The Drinking Water Disparities Framework: On the origins and persistence of inequities in exposure. *American Journal of Public Health* | Framing Health Matters, **104**: 603 611.
- Joshua S. Gruber, Fermin Reygadas, Ben Arnold, Isha Ray, Kara L. Nelson & John Colford, Jr. (2013). A stepped wedge, cluster-randomized trial of a household UV-disinfection and safe storage drinking water intervention in rural Baja California Sur, Mexico. *American Journal of Tropical Medicine and Hygiene*, 89: 238 – 245.
- 16. Carolina Balazs, Rachel Morello-Frosch, Alan Hubbard & **Isha Ray** (2012). Environmental justice implications of arsenic contamination in California's San Joaquin Valley: a cross-sectional cluster-design examining exposure and compliance in community drinking water systems. *Environmental Health*, **11**:84 (14 November 2012).
- 17. Anita Milman & Isha Ray (2011). Interpreting the unknown: Uncertainty and the management of transboundary groundwater. *Water International*, **36**: 631 645. [Special Issue on: Strengthening Cooperation on Transboundary Groundwater Resources].
- Carolina Balazs, Rachel Morello-Frosch, Alan Hubbard & Isha Ray (2011). 'Social disparities in nitrate contaminated drinking water in California's San Joaquin Valley.' *Environmental Health Perspectives*, 119: 1272 – 1278.13
- Giorgos Kallis, Isha Ray, Julian Fulton & James McMahon (2010). Public versus private: Does it matter for water conservation? Insights from California. *Environmental Management*, 45: 177 – 191.
- 20. David McKenzie & Isha Ray. (2009). Urban water supply in India: Status, reform options, and possible lessons. *Water Policy*, **11**: 442 460.
- 21. Jaquelin Cochran & Isha Ray. (2009). Equity reexamined: A study of community-based rainwater harvesting in Rajasthan, India. *World Development*, **37**: 435 444.
- 22. Carol de Wilde, Anita Milman, Yvonne Flores, Jorge Salmeròn & Isha Ray. (2008). An integrated method for evaluating community-based safe water programs and an application in rural Mexico. *Health Policy and Planning*, **23**: 452 464.
- 23. Isha Ray (2007). Women, water and development. *Annual Review of Environment and Resources*, **32**: 421 449.
- Isha Ray (2005). Get the prices right: Water prices and irrigation efficiency. *Economic and Political Weekly*, August 13 2005: 3659 3668.
 [<u>Reprinted</u> as Ch 4 in F. Molle and J. Berkoff (eds.) (2007) *Irrigation Water Pricing: The Gap Between Theory and Practice*, Wallingford: CABI Publishing]

- 25. **Isha Ray** & Jeffrey Williams (2002). Locational asymmetry and the potential for cooperation on a canal. *Journal of Development Economics*, **67**: 129 155.
- 26. **Isha Ray** & Serap Gül (1999). More from less: policy options and farmer choice under water scarcity. *Irrigation and Drainage Systems*, **13**: 361 383.
- 27. **Isha Ray** & Jeffrey Williams (1999). Evaluation of price policy in the presence of water theft. *American Journal of Agricultural Economics*, **81**: 928 941.

Sanitation and development

- 1. CS Sharada Prasad & Isha Ray (forthcoming). "When you start doing this work, it is hard to eat *dal*": Life and work in a manual scavenger family. *Economic and Political Weekly* | Commentary.
- 2. CS Sharada Prasad & Isha Ray (2018). "It Has to Be Done Only at Night": Human Waste Disposal in Bengaluru. Commentary | *Economic and Political Weekly*, v(LIII), 13-21.
- 3. NC Narayanan, **Isha Ray**, Govind Gopakumar, & Poonam Argade (2017). Towards sustainable urban sanitation: A capacity-building approach to wastewater mapping for small towns in India. *Journal of Water, Hygiene and Sanitation for Development*. DOI: 10.2166/washdev.2017.071
- Zachary Burt, Kara Nelson & Isha Ray (2016). Towards Gender Equality through Sanitation Access. United Nations Women Discussion Paper. <u>http://www.unwomen.org/en/digital-library/publications/2016/3/towards-gender-equality-through-sanitation-access</u>
- 5. Ashley Murray & Isha Ray (2010). Back-end users: the unrecognized stakeholders in demanddriven sanitation. *Journal of Planning, Education and Research*, **36**: 94 – 102.
- 6. Ashley Murray & Isha Ray (2009). Wastewater for agriculture: A reuse-oriented planning model and its application in peri-urban China. *Water Research*, **44**: 1667 1679.
- Ashley Murray, Isha Ray & Kara Nelson (2009). An innovative sustainability assessment for urban wastewater infrastructure and its application in Chengdu, China. *Journal of Environmental Management*, 90: 3553 – 3560.

Technology and Society

1. Veronica Jacome and Isha Ray (2018). The prepaid electric meter: Rights, relationships and reification in Unguja, Tanzania. *World Development*. DOI: 10.1016/j.worlddev.2018.01.007

- 2. **Isha Ray** & Renee Kuriyan (2012). Poverty and profits in the information age. *Information Technology and International Development*, 8 (1): iii viii. [Introduction to Special Issue on: Poverty and Profits in the Information Age]
- Gabrielle Wong-Parodi, Hadi Dowlatabadi, Tim McDaniels & Isha Ray (2011). Influencing attitudes towards carbon capture and sequestration: A social marketing approach. *Environmental Science and Technology*, 45: 6743 – 6751.
- 4. **Isha Ray** & Renee Kuriyan (2011). Towards Aspirations as a Development Indicator: The Case of Information and Communication Technologies. *Proceedings of the 4th IEEE/ACM International Conference ICTD 2010.*
- Judith Bradbury, Isha Ray, Tarla Rai Peterson, Sarah Wade, Gabrielle Wong-Parodi & Andrea Feldpausch (2009). The role of social factors in shaping public perceptions of CCS: Results of multi-state focus group interviews in the US. *Energy Procedia* 1: 4665 – 4672.
- 6. Gabrielle Wong-Parodi & Isha Ray (2009). Community perceptions of carbon sequestration: Insights from California. *Environmental Research Letters*, 4. DOI:10.1088/1748-9326/4/3/034002.
- 7. Renee Kuriyan & Isha Ray (2009). Outsourcing the state? Public-private partnerships and information technologies in India. *World Development*, **37**: 1663 1673.
- Renee Kuriyan & Isha Ray (2009). E for "Express": Seeing the Indian State Through ICTD. Proceedings of the 3rd IEEE/ACM International Conference ICTD 2009: 66 – 73.
- 9. Gabrielle Wong-Parodi, **Isha Ray** & Alexander Farrell (2008). Environmental non-government organizations' perceptions of geologic sequestration. *Environmental Research Letters*, 3. http://www.iop.org/EJ/abstract/1748-9326/3/2/024007
- Renee Kuriyan, Isha Ray & Kentaro Toyama. (2008). Information and communication technologies for development: The bottom of the pyramid model in practice. *The Information Society*, 24: 93 – 104.
- Renee Kuriyan & Isha Ray (2007). Private Public Partnerships and Information Technologies for Development in India. *Proceedings of the 2nd IEEE/ACM International Conference ICTD 2007*: 310 – 320.
- 12. Renee Kuriyan, Kentaro Toyama, & Isha Ray (2006). Integrating Social Development and Financial Sustainability: The Social and Political Challenges of Kiosks. *Proceedings of IEEE International Conference ICTD 2006:* 121 130.

Natural Resources and Development

- 1. Epstein, K., J. DiCarlo, R. Marsh, B. Adhikari, D. Paudel, I. Ray and I. E. Måren (2018). Recovery and adaptation after the 2015 Nepal earthquakes: a smallholder household perspective. *Ecology and Society* 23 (1):29. DOI: https://doi.org/10.5751/ES-09909-230129
- Kathleen Epstein, Jessica DiCarlo, Robin Marsh, Isha Ray & Inger Måren (2017). Post-disaster coping strategies of smallholder farming communities in Nepal. Case Studies in the Environment. DOI: <u>https://doi.org/10.1525/cse.2017.000612</u>
- Isha Ray (2016). Investing in Gender-Equal Sustainable Development. United Nations Women Discussion Paper. <u>http://www.unwomen.org/en/digital-library/publications/2016/8/investing-in-gender-equal-sustainable-development</u>
- Isha Ray (2006). Outcomes and processes in economics and anthropology. *Economic Development and Cultural Change*, 54: 677 694. [<u>Reprinted</u> as Ch 4 in Bardhan and Ray (eds) *The Contested Commons*, Blackwell Publishing 2008]
- Pranab K Bardhan & Isha Ray (2006). Methodological approaches to the question of the commons. *Economic Development and Cultural Change*, 54: 655 676.
 [<u>Reprinted</u> as Ch 1 in Bardhan and Ray (eds) *The Contested Commons*, Blackwell Publishing 2008]

Book Chapters

Carolina Balazs & Isha Ray (2015). Water Justice in California's Central Valley. Chapter 11 in Lassiter, Allison (ed.) *Sustainable Water*. Berkeley: University of California Press.

Isha Ray (2015). Transformative Investments for Gender-Equal Sustainable Development. Chapter 6 in Leach, Melissa (ed.) *Gender Equality and Sustainable Development Pathways*. Abingdon & New York: Routledge. [Based on Ray 2016 United Nations Women Discussion Paper]

PK Bardhan & Isha Ray (2008 and 2014). Methodological Approaches in Economics and Anthropology. In John B. Davis and Wilfred Dolfsma (eds.) *Elgar Companion to Social Economics.* Edward Elgar Publishing.

Other Publications

CS Sharada Prasad & Isha Ray (2017). Photo-Essay: Where There are no Sewers -- The Toilet Cleaners of Lucknow. *India Water Portal* <u>http://www.indiawaterportal.org/articles/where-there-are-no-sewers-</u>toilet-cleaners-lucknow

■ Selected by *India Water Portal* as one of seven "The Best of 2017" contributions of the year (<u>http://mailchi.mp/indiawaterportal/the-best-of-2017?e=ddf4dcbf44</u>)

Also in: Counter Currents (11/14/2017). http://www.countercurrents.org/2017/11/14/photo-essaywhere-there-are-no-sewers-the-toilet-cleaners-of-lucknow/; The Wire (11/19/2017). https://thewire.in/198241/where-there-are-no-sewers-the-toilet-cleaners-of-lucknow/; Athena Infonomics (11/21/2017). https://www.athenainfonomics.in/2017/11/21/lucknow-toilet-cleaners/ **Isha Ray** (2017). Public Spaces, Private Acts: Toilets and Gender Equality. *ITEMS* | <u>Launching paper</u> for *Just Environments* series | May 30: <u>http://items.ssrc.org/public-spaces-private-acts-toilets-and-gender-equality/</u>

<u>Co-Chair and Lead Author</u> *Report of the Expert Group Meeting on the CSW 60 Priority Theme:* Women's Empowerment and the Link to Sustainable Development (2015). New York: UN Women. <u>http://www2.unwomen.org/~/media/headquarters/attachments/sections/csw/60/csw60%20egm%20re</u> port.pdf?v=1&d=20160128T152130

Isha Ray (May 30 2015). India's emergency in slow motion. *CNN.com Opinions*: http://www.cnn.com/2015/05/29/opinions/ray-india-heatwave-emergency/index.html

<u>Contributing Author</u> to *Gender Equality and Sustainable Development*: World Survey on the Role of Women in Development (2014). New York: UN Women. <u>http://www.unwomen.org/~/media/headquarters/attachments/sections/library/publications/2014/unw</u> <u>omen_surveyreport_advance_16oct.pdf</u>

Isha Ray. (2013). 'Challenges and Achievements in Millennium Development Goals for Water and Sanitation for Women and Girls'. UN Women Expert Group Briefing Paper. http://www.unwomen.org/~/media/Headquarters/Attachments/Sections/CSW/58/EP11-IshaRay%20pdf.pdf

<u>Contributing Author</u> to Report on Structural and Policy Constraints in Achieving the MDGs for Women and Girls (2013). *58th United Nations Commission on the Status of Women*, New York http://www.unwomen.org/~/media/Headquarters/Attachments/Sections/CSW/58/CSW58-2013-EGM-Report-en.pdf

Isha Ray. 2008. 'Women and water in the developing world.' March 20, 2008. In: *Encyclopedia of Earth*, Cutler J. Cleveland (ed). Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment. <u>http://www.earthportal.org/?p=714</u> [Based on Ray 2007 in *Ann. Rev. Envir. Res*]

Renee Kuriyan, **Isha Ray** & Daniel Kammen (2008). 'How to use technology to spur development.' *Issues in Science and Technology*, Winter 2008: 70 – 74.

Giorgos Kallis, Michael Kiparsky, Anita Milman & Isha Ray (2006). 'Glossing over the complexity of water.' *Science* Letters 314: 1387 – 1388, 1 December 2006.

Courses taught

1. Social Science Research Methods

Epistemology, Sampling, Surveys, Interviewing, Content Analysis, Participant Observation, Comparative Method, Case Study Method, Ethics.

2. Water and Development

The Politics, Economics and Policy of Water and: health, sustainable development, participatory development, gender, financing, privatization, transboundary cooperation.

3. Environmental Classics

From Rachel Carson to Michael Pollan: non-academic books and papers that have framed our thoughts on nature, culture and resources.

4. Community-Driven Development

Theory and case studies of community-based and participatory development approaches in the developing world

PhD students graduated

CS Sharada Prasad, 2018 (Independent Scholar and Photographer | Bangalore, India) Alasdair Cohen, 2016 (Postdoctoral Scholar | UC Berkeley) Zachary Burt, 2015 (Postdoctoral & Fulbright Scholar | Columbia University) Julian Fulton, 2015 (Assistant Professor | California State University, Sacramento) Cleo Woelfle-Erskine, 2015 (Assistant Professor | University of Washington, Seattle) Fermin Reygadas Gil Robles, 2014 (Ashoka Fellow | Co-Founder and Director-General, Fundación Cántaro Azul, Mexico) Deborah Cheng, 2013 (Program Officer | Social Sciences Research Council, New York) Carolina Balazs, 2012 (Research Scientist | OEHHA | US Environmental Protection Agency) Gabrielle Wong-Parodi, 2011 (Assistant Research Professor | EPP, Carnegie-Mellon University) Anita Milman, 2010 (Associate Professor | University of Massachusetts-Amherst) Ashley Muspratt, 2009 (Founder | PIVOT, Inc; Rwanda) Renee Kuriyan Wittemyer, 2009 (Lead for Women & Technology | Executive Office of Melinda Gates) Jaquelin Cochran, 2008 (Senior Energy Analyst | National Renewable Energy Laboratory) Renata Andrade, 2006 (Faculty | Catholic University of Brasilia)

Invited Talks

'The Sanitation Goal in the SDGs'. *Sustainable Development Expert Group Meeting* in preparation for *High-Level Policy Forum* 2018. United Nations Headquarters, New York, January 2018.

'At the Two-year Mark for Swachh Bharat: A Tale of Two Scavengers' (with C. Sharada Prasad). Institute for South Asia Studies, UC Berkeley, October 2017. <u>https://southasia.berkeley.edu/swacch-bharat</u>

'Gender Equality: A View from the Loo'. Homecoming Lecture; UC Berkeley, October 2016

Graduation Speaker, Global Poverty and Practice Minor, University of California, Berkeley. May 2016.

'Towards Gender Equality through Sanitation Access'. *Emerging Issues in Gender and WASH*. United Nations 60th Meeting of the Commission on the Status of Women. New York, March 2016.

'Gender Equality: A View from the Loo'. *TEDx Berkeley*. UC Berkeley, February 2016. https://www.youtube.com/watch?v=CvE8AWI8Wb4

'Sustainable Development and Gender Equality: A Post-2015 Perspective.' *Reducing Inequality in a Sustainable World*. UC Berkeley, March 2015.

'Household Welfare and Political Impacts of Increasing Service Predictability' (paper with Tanu Kumar and Alison Post). Urban Poverty Workshop. Duke University, December 2014.

'Socially Transformative Investments for Sustainable Development and Gender Equality.' UN Women Expert Group Meeting. FAO: Rome, Italy. February 2014.

'Water, Sanitation and the Millennium Development Goals,' *Economic Commission for Latin America and the Caribbean*. Mexico City, Mexico. October 2013.

United Nations Women Concepts and Methods Workshop for the *World Survey on the Role of Women in Development. UN Women,* New York. September 2013.

'Shared Rivers: Conflict and Cooperation on the Ganga-Brahmaputra-Meghna Basin'. International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal. August 2013.

'Safe Drinking Water: Access, Affordability, Acceptance'. Laboratoire d'étude des Transferts en Hydrologie et Environnement (LTHE), Grenoble, France. July 2013.

'Access, Vulnerability and Drinking Water.' NSF-UC Santa Cruz Workshop on *Equity and Water Governance*, Santa Cruz, California. February 2013.

'The Persistence of the Informal Within the Formal' (paper with Zachary Burt). UNESCO-IHE workshop on *Informal Spaces in the Urban Waterscape*, Delft, The Netherlands. December 2012.

'Access to Basic Amenities: Goals, Payments and Accountability.' The World Bank's 6th Urban Research and Knowledge Symposium (URKS6). Rethinking Cities: Framing the Future, Barcelona, Spain. October 2012.

'Social Disparities in Drinking Water Quality in California's San Joaquin Valley' (paper with Carolina Balazs, Alan Hubbard and Rachel Morello-Frosch). Inaugural Water and Society Session on *The Evolution of Water Management Paradigms, American Geophysical Union* (AGU), San Francisco. December 2011.

'Waste not, want not' (paper with Ashley Murray). India Cities Conference, New Delhi, India. March 2011.

'Development Research and the Social Sciences.' *Microsoft Research India / Indian Institute of Science Summer School on Technology for Socio-Economic Development*, Bangalore, India. June 2010.

'Women, Water and the Millennium Development Goals.' 109th General Meeting of the American Society of Microbiologists, Philadelphia. May 2009.

'Water and Development in India.' Perspectives on an Evolving India, UC Berkeley. April 2009.

'Irrigation Water Prices: Implications for Equity and Efficiency.' 4th World Conference on the Future of Science, Venice, Italy. September 2008.

'Conflict and Cooperation Over "Shared" Waters: What Does History Tell Us?' *Water and the Developing World*, Stanford University. April 2008.

'Equity and Water in Smallholder Agriculture.' *17th Annual Global Health Education Consortium Convention*, Sacramento. April 2008.

'Water, Technology and Development: The Tale of the Hand-Pump'. *CITRIS-Europe Conference*, London, UK. July 2007.

'Household Water Delivery Options in Rural and Peri-urban India' (with David McKenzie). Stanford Center for International Development, *Fifth Annual India Conference*, Stanford University. June 2004.

Invited Panels & Podcasts

Empowering Rural Women and Girls. Multi-Stakeholder Forum for the Commission on the Status of Women (CSW62). United Nations Headquarters, New York, January 2018.

Water: California in a Global Context. American Academy of Arts and Sciences. Stanford, February 2016. https://www.youtube.com/watch?v= CAI3VNtPMU

World Affairs Council Podcast: *What's it like to worry about every drop?* <u>https://soundcloud.com/world_affairs/access-to-water-whats-it-like-to-worry-about-every-drop</u>

On The Same Page with Katherine Boo ("Behind the Beautiful Forevers"). UC Berkeley, September 2015. <u>http://onthesamepage.berkeley.edu/event-videos</u>

Clean India: Stimulating Behavior Change and Usage. University of Chicago. New Delhi, April 2015.

UC Berkeley visit of UN Women Executive Director, Dr. Phumzile Mlambo-Ngcuka, on *Gender for a New Century*. UC Berkeley, December 2014.

World Survey on the Role of Women in Development, 2014, official release. UN Headquarters, New York. October 2014. <u>http://m.webtv.un.org/meetings-events/watch/role-of-women-in-development-world-survey---panel-discussion/3849714459001</u>

Belmont Forum Freshwater Security Panel of Experts Meeting (II), National Science Foundation (USA) and Natural Environment Research Council (UK), Washington, DC. March 2013.

Belmont Forum Freshwater Security Panel of Experts Meeting (I), National Science Foundation (USA) and Natural Environment Research Council (UK), London, UK. September 2012.