

**Final Report**  
**Sustainability Science Program**  
**Term: September 1, 2014 – August, 2015**

**Name:** Shibani Ghosh

**Your fields:**  
Environmental Law and Regulation in India

**Your degree program, institution and graduation date:**  
M.Sc. in Environmental Change and Management, Environmental Change Institute, University of Oxford, 2008

**Faculty host at Harvard:**  
Rohini Pande, Mohammed Kamal Professor of Public Policy, Harvard Kennedy School

**Description of SSP-related research activity:**  
Reforming the liability regime for air pollution in India

**Abstract:** Despite there being a law and a regulatory structure in place for more than three decades, air pollution in India has only shown a sharp upward trajectory. While a burgeoning population, increasing industrialization, and critical development imperatives are significant contributors to this phenomenon, the abject failure of the regulatory regime to arrest this upward trend cannot be ignored. The Air (Prevention and Control of Pollution) Act 1981 [Air Act] has remained frozen in time, with its key provisions unable to cope with the nature and extent of pollution faced by the country in present times. One issue in particular that needs to be highlighted is the capacity of the regulatory agencies – i.e. the Pollution Control Boards – to monitor sources of air pollutants, and to ensure effective compliance with applicable standards. The representation made to the Committee proposes amendments to the current legal regime with the objective of introducing civil penalties, load standards and market-based regulations.

**Identification of the problem you address:**  
If the primary objective of criminal liability under the Air Act is to deter future offenders, it is certainly not being achieved by the procedure set out in the law. Additionally, the time taken to conclude legal proceedings does not augur well for effective and timely pollution abatement. The concerned regulatory agencies (Pollution Control Boards) need to have the power to penalize polluters immediately and proportionately to the pollution caused. This penalty should act as an effective deterrent against continuing violation of the law, and to comply with applicable standards.

**Key question asked about the problem:**  
Should the nature of liability being imposed by the Air Act change from criminal to civil? Should the Boards be empowered to levy penalties? Should regulatory process to control pollution move away from the current model of command and control?

**The methods by which you answered that question:**  
Review of relevant academic literature as well as case law from Indian courts.

**Principle literature upon which the research drew:**  
Legal and regulatory literature on air quality/ environment management, specifically examining civil and criminal enforcement regimes, and market-based mechanisms.

**Empirical data acquisition description:**  
N/A

**Geographical region studied:**  
India

**Recommendations that might be relevant for your problem:**

N/A

**A description of the final product you have/are aiming to produce:**

Representation dated 13 October 2014 made to the TSR Subramanian Committee set-up to review Indian environmental laws. The representation was titled 'Recommended Amendments to India's Water and Air Acts'.

**Description of major other intellectual or professional advancement activities over the past academic year:**

- Accepted as a Fellow at the Centre for Policy Research, New Delhi.
- Involved in a public interest litigation (PIL) before the Supreme Court of India to protect elephants held in captivity across various states in India from cruelty.
- Coordinator of a project to prepare an Analytical Lexicon on principles and rules in Indian environmental law. The project is now complete and the final report has been submitted to the funder (Indian Council on Social Science Research). The papers submitted as part of the project have been converted into an edited volume and the manuscript tentatively titled 'PRINCIPLES OF INDIAN ENVIRONMENTAL JURISPRUDENCE' is now with the publishers (Orient Black Swan).
- Teaching the environmental law module to students pursuing MBA in Real Estate & Urban Infrastructure at the RICS – School of Built Environment, Amity University, NOIDA, Uttar Pradesh
- Co-authoring a Submission to the TSR Subramanian Committee titled 'A Framework of Principles For Environmental Regulatory Reform'; available at <http://cprindia.org/publications/policy-briefs/5522-framework-principles-environmental-regulatory-reform>
- Contributing to a UNDP-funded project reviewing the implementation of the Right to Information Act 2005 in India (focusing on the working of the Central Information Commission).

**Please list citations for reports, papers, publications and presentations that built on your fellowship research:**

Shibani Ghosh, *Reforming the liability regime for air pollution in India*, (2015) ENVIRONMENTAL LAW AND PRACTICE REVIEW (forthcoming)

**Please describe any collaborative activities with other SSP Fellows that you are involved with.**

Anish Sugathan and I are exploring the possibility of co-writing a piece on regulation of pollution caused by power plants in India.

**Principal collaborators outside Harvard (list name and institution):**

Michael Greenstone, Professor of Economics, University of Chicago; Nicholas Ryan, Assistant Professor of Economics, Yale University; Anant Sudarshan, Executive Director (India), Energy Policy Institute, Chicago