Final Progress Report Sustainability Science Program

Term: September 1, 2013 – August 1, 2014

Name:

Varad Pande

Your field:

Public policy

### Your degree program, institution and graduation date:

Master in Public Administration in International Development, Harvard Kennedy School, 2005

#### Faculty host at Harvard name and department:

Rohini Pande, Harvard Kennedy School

#### Description of SSP-related research activity, including a title:

Market Mechanisms for Environmental Regulation: What We Have Learnt from India's Perform-Achieve and Trade (PAT) Programme

#### Abstract:

As India embraces the path of rapid economic growth, the debate of "growth vs. sustainability" is centre stage. One possible way of addressing this conundrum is to look for more innovative approaches to environmental regulation that achieve their objective of reducing environmental damage while reducing the 'costs' faced by industries of complying with environmental norms. Such approaches can harness 'market mechanisms', i.e., allow industries to trade with each other to reduce their cost of compliance. The Paper analyses one such model –The Perform Achieve & Trade (PAT) programme of India – assessing the political and administrative challenges of getting it off the ground, identifying key learnings and areas for improvement.

#### **Identification of the problem you address:**

Traditional approached to environmental regulation, especially in developing countries, tend to be bureaucratic, difficult to implement, and costly on firms. Market mechanisms provide a new innovative approach. The PAT programme provides a good laboratory to test the implementational challenges of one such market mechanism in practice.

#### **Key question asked about the problem:**

- How did PAT get off the ground in a status-quoist regulatory system?
- What have been the challenges in its implementation and how were they overcome?
- What are the areas for improvement going forward?
- What lessons can be learnt for similar market based approaches in other countries?

# The methods by which you answered that question:

- Study of existing literature on market based approached to environmental regulation
- In-depth interviews of key stakeholders involved in design, implementation and use of the PAT programme

#### Principle literature upon which the research drew:

• Market-based approaches to environmental regulations

# **Empirical data acquisition description:**

- In-depth interviews
- Database of Designated Consumers (DCS) participating in the PAT programme

#### Geographical region studied:

India

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

Series of recommendations and learnings are summarised in the Paper

#### A description of the final product(s) you have/are aiming to produce:

SSP/CID Discussion Paper

# Description of major other intellectual or professional advancement activity(ies) over the past academic year:

- Continued and completed assignment with the Indian Government as Special Advisor to the Minister for Rural Development
- Appointed Non Resident Fellow at the Center for International Cooperation, New York University

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

- Bureau of Energy Efficiency (BEE) Presentation: http://beeindia.in/NMEEE/NMEEE2.ppt
- Climate & Development Knowledge Network: http://cdkn.org/resource/creating-market-support-for-energy-efficiency-indias-perform-achieve-and-trade-scheme/
- Climate & Development Knowledge Network: http://cdkn.org/wp-content/uploads/2013/01/India-PAT\_InsideStory.pdf
- Energy Conservation Act (2001), India: http://powermin.nic.in/acts\_notification/pdf/ecact2001.pdf
- National Action Plan on Climate Change (2008), Government of India
- Duflo E, Greenstone M, Pande R, Ryan N: Towards an Emissions Trading Scheme for Air Pollutants in India CEEPR Working Paper: http://web.mit.edu/ceepr/www/publications/workingpapers/2010-011.pdf
- Various interviews and discussions

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

Creating an agenda for innovations in environmental governance in India, with SSP Fellow Anant Sudarshan

# Principal collaborators outside Harvard:

NΑ

List any awards or grants that you have received this year for the current or coming year. Please provide details regarding title of award, financial amount, and date of award: NA

#### If you are moving to a new position, please list your contact information there:

Consultant, Water Global Practice, The World Bank 443 New York Ave, NW, Washington DC 20001 varadpande@gmail.com