

**Final Progress Report**  
**Sustainability Science Program**  
**Term: September 1, 2013 – August 1, 2014**

**Name:**  
Yusuf Neggers

**Your fields:**  
Development Economics, Political Economy

**Your degree program, institution and graduation date:**  
Public Policy PhD, Harvard, Expected May 2016

**Faculty host(s) at Harvard name and department:**  
Rohini Pande, Harvard Kennedy School

**Description of SSP-related research activity:**

The Impacts of Formal Rural Land Tenure on Forests and Scheduled Tribes in India: Evidence from Madhya Pradesh

**Abstract:**

I will construct a unique dataset of household-level land areas in Madhya Pradesh, India formally tenured under the Forest Rights Act of 2006 and use the associated geo-coded information to match to high-resolution satellite data on forest cover from various points in time and to village-level census data from 2001 and 2011. I will then make use of the fact that formal land tenure was given to plots at different times between 2008 and the present to examine the impact of the provision of these rights to large numbers of Schedule Tribe members on forest cover and village-level economic outcomes.

**Identification of the problem you address:**

The receipt of formal land rights over an area, which reduces the uncertainty over possession of that land and its associated non-timber forest products in future periods, under certain circumstances increases the marginal returns to investment in and/or management of a parcel of land. Assuming that individuals are choosing their behavior to maximize the net present value of the stream of goods and services received from the land on which they are based (previously without formal rights), economic theory would predict an increase in such investment activity. The extent to which this actually occurs and why are questions to be examined empirically. Estimates of the overall magnitude of the effects of land tenure on forest cover and economic well-being should also take into account the potential presence of spillover effects of the tenuring of parcels of land on nearby households, village, and forest areas.

**Key question asked about the problem:**

Do we observe an increase in forest cover from a more careful management of tenured plots associated with the increased time horizon of individuals? What are the impacts on economic outcomes and proxies for individual welfare, as in the short-to-medium term there may be a decrease in forest product revenues received by tenured individuals? Does the increased local management and scrutiny placed on a land tenured area simply displace potentially adverse human activity to adjacent plots, leading to an offsetting increase in deforestation? Or might land tenure have positive effects on nearby parcels, for example, by updating the general awareness of local communities of the importance of preserving forest cover?

**The methods by which you answered that question:**

I will use a fixed-effects regression econometric approach to exploit land tenure variation within households and villages over time to examine the impacts on forest cover and economic well-being.

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

Development and agricultural economics

**Empirical data acquisition description:**

I traveled multiple times this year to meet with Mr. Anil Oberoi, Additional Principal Chief Conservator of Forests (Information Technology), at the Ministry of Forests in Madhya Pradesh and his staff member, Mr. Dharendra Bhargava, to facilitate acquisition the department's digital data associated with the Forest Dwellers Land Mapping Survey. I was then referred to Tribal Welfare Department of Madhya Pradesh, from which I am currently trying to receive permission for the data.

**Geographical region studied:**

Madhya Pradesh, India

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

NA

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

An article in a peer-reviewed economics journal.

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

- (1) I successfully defended my dissertation prospectus;
- (2) presented a co-authored paper on the adoption of electronic procurement for public works projects in the developing world, "Can Electronic Procurement Improve Infrastructure Provision? Evidence from Public Works in India and Indonesia", at the Northeastern Universities Development Consortium Conference;
- (3) submitted the article from (2) for consideration of publication at the American Economic Journal: Economic Policy; and
- (4) created a draft of a sole-authored research paper examining the impacts of the adoption of open meetings laws by state legislatures on legislative activity and electoral outcomes in the US, "Open Meetings Statutes in US State Legislatures: Impacts of Increased Transparency".

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

NA

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

Participated in the SSP funded research workshop "Politics and Development in an Emerging State: Workshop on the Political Economy of Bihar."

**Principal collaborators outside Harvard:**

NA

**List any awards or grants that you have received this year for the current or coming year:**

NA