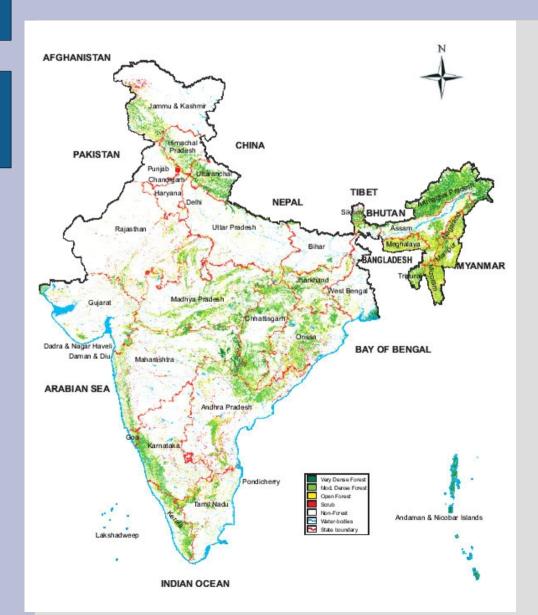
# Community Forestry in India: Evaluating the roles of state and community in natural resource management

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### **Changes in Forest Cover**



- Slight increase in forest cover over the last decade
- 1993 2003: 3 million hectares have regenerated
- High variation across the states

### Joint Forest Management

- Increase in Forest Cover coincident with Joint Forest Management
- 21 million hectares under joint management
- 13.8 million families organized into 99,000 units across all states
- Wide variation across states

### JFM and Regeneration

 Uttaranchal – 6000 sq.km. under JFM in 2000, 1200 sq.km. regenerated in 2003

 Himachal Pradesh – 1100 sq.km. under JFM in 2000, 1800 sq.km. regenerated in 2003

Does JFM explain forest regeneration?

# Tenure Reforms (or lack thereof) and India's Forests

- No meaningful or substantive movement towards collective tenure
- Local collective action and regenerating forests
- The limitation of property rights approach and the power of collective action
- Thinking management regimes as bundles of rights and contractual arrangements

### **Myth and Reality of Community**

- Personal, enduring, and unequal
- Opposition to 'Community' in Indian political debates
- Role of state in leveling the playing field
- Direct efforts
  - Centralization of power and authority
  - Affirmative action
- Indirect consequences of political mobilization

## Increasing Opportunities for Local Collective Action in India

- Widespread political mobilization since 1971
- Trends towards decentralization since 1993
- 73<sup>rd</sup> Constitutional Amendment and systems of local governance
- Increasing vertical articulation in the Indian political system
- Local collective action without collective tenure

#### The Indirect Role of State

- Enabling local collective action
  - Literacy and political awareness
  - Secular community organizations for local collective action
- Building new political 'communities'
  - Not traditional
  - Rooted in the idea of equality
  - Based on deliberative principles

## Local Collective Action and de facto Collective Tenure

- Not an argument against collective tenure
- Collective tenure as necessary but not sufficient
- Neglected role of state in debates on collective tenure and common property
- The limitations of collective tenure in disarticulated political systems

# Community in Forest Management in India

- Beyond tenure: local capacity for collective action
- Forest regeneration happens where community capacity is enabled by state efforts
- Communities perform better in articulated political systems

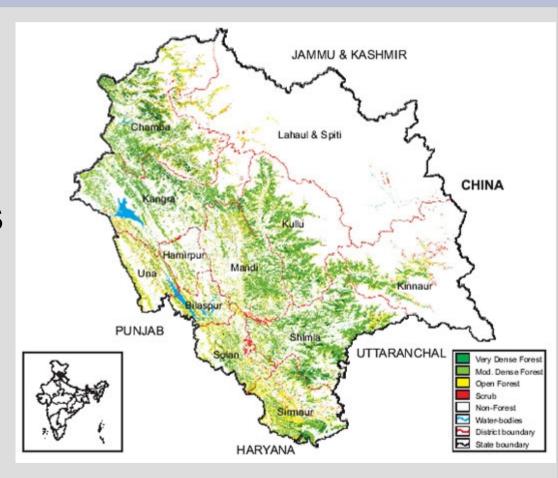
## Testing the Propositions in Himachal Pradesh

#### Why Himachal Pradesh

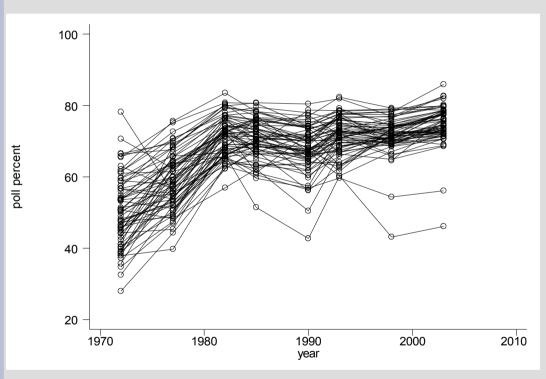
- Increasing aggregate forest cover, but variation within the province
- No transfer of property rights over forests in favor of communities
- Relatively recent and limited efforts at Joint Forest Management
- Highly articulated political system
- Various forms of local collective action in forest management

### **Statistical Analysis**

- Unit of analysis between household and region
- 10 out of 12 districts
- 8 management regimes
- 205 forests, 95 under communal management



#### Capturing the Role of State



- Level of political participation
- Women's literacy
- Village organizations
- Plantation activity

### Regression Results

Change in Forest Condition in the Last Five Years			
Women's Literacy	0.134***	Communal	0.254**
		Management	
Presence of Village	0.422**	Conflict Resolution	0.741***
Organizations		Mechanism	
Political Participation	0.033***	Plantation Activity in	0.227***
		Forest	

R-Squared 0.593; Adjusted R-Squared 0.546; N = 205,  $F_{(21, 183)} = 12.69$ 

For full details, see accompanying handout.

#### Regression Results – In words

- Forests under community management (but without collective ownership) perform better than state managed forests
- Forests located in regions with higher political participation perform better
- Positive role of state women's literacy, village organizations, and plantation

#### Conclusions

- Decentralized collective action important for forest regeneration
- Validation of the role of community in natural resource management
- Complementarity between state and community
- The power of local collective action in articulated political systems

### **Broader Relevance of Findings**

- Broadening and deepening political articulation across the developing world
- Patterns of social mobilization and role of civil society – strengthening local capacity for collective action
- Collective tenure or ownership not sufficient, but necessary for sustainability
- State policies and forest cover change direct and indirect effects