Development, People & Environment in India

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Fig 2.2: Distribution of Forest Cover in India
Forest – tribal linkages
Mining

- Collusion of officials and politicians in permitting illegal mining
- Underpayment of royalties to state
- Environmental damage
- Related road damage, accidents and loss of lives
- Breach of Forest Rights Act
- Employment to local tribals?
Should government acquire land for industry?

- Land markets in India are imperfect
- Asymmetry of power (and information) between industry and landowners
- Land records are not in a good shape
- Minerals and natural resources in the poorest region, where tribals could be exploited by the land mafia
- Livelihood losers will gain nothing from private transactions
- Cash gets spent fast leaving people impoverished in the long run
four hypotheses

• poverty causes environmental degradation
• other factors, such as market failure, institutional failure and policy failure cause environmental degradation
• environmental degradation harms the poor and often results in more poverty
• factors outside the realm of natural resources cause poverty
Livelihoods & Ecology

Inversely related?
Increasing poverty degrades forests and common lands

- High dependence of the poor on natural resources that are not privately owned
- Poor have a short time horizon, absence of options
- Carrying capacity concept – maximum number of people that can be supported by a given habitat
- As poverty increases, more encroachments on forests/grazing/vacant lands, cowdung for fuel rather than manure, shorter cycle of shifting cultivation, urban congestion
- Poor cannot afford cleaner fuels, and burn bio-fuels to cook their food. This degrades environment & also leads to deterioration in their health
Carrying a load of tree fodder
Indoor Air Pollution  ➔ Acute Respiratory Infections

In India, women’s risk of mortality is 50% higher than men’s. Also several thousand infants die per year
Deforestation - other factors

- **Managerial:** people not involved, forests as open access lands
- **Technical:** wrong silviculture, wrong species
- **Political:** commercial interests, corruption, nationalisation of MFPs, and de-nationalisation of minerals
- **Sociological:** lack of cohesion in the village

*Poor institutional capability*
Handbooks and Pictorial Guides

- Guide to Reef fishes of A & N Islands
Causes of land degradation

- Lack of control of floods
- Bad drainage
- Waterlogging caused by excessive use of water
- Failure of watershed development programmes
- Vanishing common lands & forests

Choice of crops & policy distortions
Cashew plantations in Orissa

- Cashew plantation raised by the Cashew Development Corporation on 120,000 hectares of “Government Wastelands” on tribal lands
- Tribals shifted to hills, which led to soil degradation
- Corporation made losses, it gives annual leases for harvesting of cashew crops to private parties
- Often such plantations are in a degraded condition
- It is ironical that these plantations that deprived the tribals of their possession were funded by a scheme called, ‘Economic Rehabilitation of the Rural Poor’.

Mid-term Review of the 9th Plan
Who uses and degrades water?

- Excessive use of water & power by large farmers
- Water pollution from leather, pulp and paper, textiles, and chemicals industries
- Tanning industry in Tamil Nadu
- Scarcity of water leads to poor demand for toilets
- River pollution caused by industrial discharge and untreated sewage
During April-May 2000, the Maharashtra Government was supplying drinking water through tankers in about 3000 villages, many of these had a well-irrigated sugarcane crop. Thus groundwater was being monopolised by rich farmers, who also took advantage of easy availability of two other scarce resources – electric power and capital. The rich farmers thus transferred the responsibility of satisfying people’s need for drinking water to the state, with the state abetting in the overuse of water by supplying them cheap power.

*Mid-term Review of the 9th Plan*
In the coastal areas of Andhra Pradesh and Tamil Nadu

The rich bought paddy cultivating areas from poor farmers and converted them into aquaculture plots for shrimp farming. Salt water was mixed with fresh water, driving these lands permanently out of paddy cultivation. For every person employed in shrimp farming five agricultural workers were rendered jobless.
Who causes outdoor air pollution?

• Main sources: Industries, coal-based thermal power stations, vehicles and biomass burning

• Indiscriminate disposal of bio-medical wastes in hospitals, nursing homes and clinics

• Air pollution in 36 major Indian cities accounted for more than 40,000 premature deaths

• Brunt of polluted air is borne more by the urban poor, as they live in slums that have little municipal services to offer
Main variables in environmental degradation

- Technology
- Market
- Access & inequalities in consumption
- Security of tenure
- Institutional failure
- Policy distortion

*Poor have little autonomy of action, hence solutions lie outside obsession with poverty*
Technology can be positive as well as a negative factor in improving environment
Impact of agricultural intensification

- Have saved forest land from being diverted for food production
- Reduction in poverty reduces pressure on natural resources
- Created conditions for farmers to do tree planting on farm lands
Technology as a negative factor

- Technology increases consumption of energy & goods
- Tubewells have resulted in over-extraction of groundwater
- Vehicles, industry, industrial waste have polluted urban environment
- Railways in the 19\textsuperscript{th} century responsible for deforestation
Do markets help or harm the poor?

Markets for NTFPs be an important source of their livelihoods and thus reduce timber felling & sustain natural biodiversity of forests. NTFPs generate recurrent and seasonal as opposed to one-time incomes, making its extraction more attractive to the poor.
But

• What is the guarantee that the benefit of high prices in the terminal markets will be passed on to the primary gatherers (marketing and equity issue)?
• And, will perception of value of the tree lead to sustainable extraction (production and environment issue)?

The relationship between conservation and commercialisation cannot be understood without referring to the third variable, tenure.

*Environmental goods and services are not priced correctly*
Bad governance and ineffective institutions

- Too many laws and regulations
- Weak monitoring and enforcement capabilities
- High corruption and nepotism
- Low priority to environment
- Misdirected subsidies
- Ineffective local action

Supreme Court’s interventions?
Does Poverty Exacerbate Degradation?

- Extraction is a function of demand, technology, power, access
- Poor farmers look after their lands, degradation is a function of lack of incentives
- Sacred groves & van panchayats (forest councils)
- Community forestry more successful in poorer areas, such as Orissa
- Rag pickers help waste recovery & recycling
The Rich & Environment

- Cattle ranching in Brazil
- CO$_2$ emissions from fossil fuels of rich countries
- Mining
- Conversion of natural forests to industrial plantations
- High economic growth of metropolitan towns leads to migration – ‘private affluence & social decay’

Who uses airconditioners?
Cost of environmental degradation in India

Assessed at 22 to 40 billion $=100,000 to 180,000 crore Rs:

• 59%: burden of disease due to unsafe water and unsanitary excreta disposal
• 20%: soil degradation
• 13%: air pollution incl. indoor pollution, and
• 8%: deteriorating sanctuaries, rangelands, loss of tourism, etc.

60% deaths due to water related diseases
How are the poor affected?

- drinking water shortages
- water-borne diseases like diarrhoea and cholera
- Poor access to toilets leads to enormous fecal contamination, causing many diseases
- 21% of all communicable diseases in India are water-borne diseases – reduced life expectancy
- reduced school attendance by girl children
- Limits women’s entry into the cash economy
Impact of land degradation

- Increases risk, hence land left fallow
- Reduces profitability from input use
- Demands more capital investment, hence increases concentration of land
- Poor forced to cultivate marginal lands
- Increases migration
<table>
<thead>
<tr>
<th>Programmes that Help the environment</th>
<th>Programmes that Help the poor</th>
<th>Programmes that Harm the poor</th>
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</thead>
<tbody>
<tr>
<td>Clean water, hygienic sanitation, gatherable biomass forestry, recharge of groundwater, soil and water conservation</td>
<td></td>
<td>Bringing more area under national parks, shift people from parks</td>
</tr>
<tr>
<td>Felling of trees and clearing of natural forests for agriculture</td>
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<td>Plantations in natural forests, over-extraction of ground water</td>
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Forests and common lands

- Strengthen JFM / CFM
- Change silvicultural practices, produce more gatherable biomass than timber
- Denationalise NTFPs, and greater control by forest dwellers over processing and markets
- Better utilisation of degraded private lands through agro-forestry
- Imposition of tariff on import of pulp
- Integrated land use management & watershed development
- Protect the asset base of the poor
- Promote gender empowerment
Water

- People’s control over management of water supply schemes
- Water to be managed as an economic asset rather than a free commodity
- Increased attention towards recharge of groundwater through afforestation and watershed development programmers
- Rainwater harvesting in water scarce regions
- Scientific utilisation of vast groundwater in eastern India through minor irrigation schemes
- Improving quality of potable water
- Better implementation of policy reforms introduced in 1999
The power of populists and naysayers
NC Saxena, Indian Express: Wed Jan 02 2013

Barring a few exceptions, many of these NGO activists think with their hearts and not with their brains. They are populists and cater to a constituency of “habitual seminar participants”. One can easily predict their stand on any development issue. For instance, they would never say that profits are legitimate or that industry is creating jobs, or that agriculture has shown vast improvements in Gujarat. They believe in development being a “zero-sum game” where the poor can benefit only when the rich are losing out. Both cannot win, according to them. Ramachandra Guha rightly called them the “No No People”. In the past, they criticised the Green Revolution, in the 1980s their target was farm forestry, and now their target is infrastructure, dams, power plants, direct cash transfer schemes, UID, PPP, etc. Reality for them is either black or white, never grey. Everywhere, they see a conspiracy engineered by the World Bank/IMF or the “neo-liberal state”.
They pick up facts selectively, or distort them. They are people in a hurry looking for quick-fix solutions. Like journalists who only write but do not read, they too only talk but have no time for comprehensive analyses of such facts that do not support their biased views. Their favourite pastime is to hog media space and run down government. No wonder, their image amongst bureaucrats is that of wasters, dependent on foreign funding. Interestingly, their differences and rivalries with each other are at times quite open. Competition for funds, professional jealousies, differences in operational traditions and the desire to be seen everywhere, are common maladies that restrict inter-NGO collaboration.
Thank You