Forest Conservation vs Conversion:
Carbon Credits and Beyond

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### Economic Benefits

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Economic Value</th>
<th>Market Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>flood prevention</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>drought control</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>carbon storage</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>recreation &amp; health</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>non-timber forest produce</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>sustainable logging</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>clear felling</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>agriculture</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>industrial &amp; urban areas</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- **All** conservation benefits of forests have **economic value** – they are **WEALTH**
- **Most** forest conservation benefits are **public benefits** – delivered by **checks & balances**
- **Most** forest conservation benefits have no **markets** – hence **no market pricing**
- In the absence of prices, checks and balances, **private greed destroys public wealth**
Valuation of the *Non-marketed* Services of Forests gives a totally different perspective on the Economics of “Conservation vs Conversion” ..... Conservation wins
Deforestation in India  
Massive Carbon Footprint

- Stern Review estimates deforestation causes 18% of GHG emissions, but these ratios are expected to be higher in Tropical, developing countries…

- …such as India: estimated CO$_2$ released by deforestation (logging, shifting cultivation & encroachment) is 26% of GHG emissions (based on 2002-03 data)

- estimated emissions: 433 Mt CO$_2$

- in comparison: Power Sector (2005-06) had total emissions of 471 Mt CO$_2$
Can we go Beyond Carbon Credits? To ..... “Conservation Credits”?

- NTFP Credits?
- Biodiversity Credits?
- Water Credits?
- Carbon Credits

Who will buy these?
Who Buys Carbon Credits?

- Annex 1 Sovereigns
- European corporate compliance buyers
- Japanese corporate compliance buyers
- Various States, & Corporates
- Hedge Funds, HNW
- Banks, Brokers
- Retail, HNW, Funds, Corporates & FI’s

Kyoto Protocol:

- European Trading Scheme (ETS)
- Japan Trading Scheme
- California, etc Trading Schemes
- Speculators
- Intermediaries
- Green Investors

Kyoto Protocol: Non-Annex 1 Countries

- Compliance
- Voluntary
- Trading
Who are the possible buyers for Conservation Credits?

<table>
<thead>
<tr>
<th>Category</th>
<th>Possible Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Compliance Buyers</td>
<td>Unlikely … “Kyoto-2” would not cover Afforestation other than for Carbon Sequestration</td>
</tr>
<tr>
<td>New National Compliance Markets</td>
<td>Possible … but needs visionary leadership in some National government</td>
</tr>
<tr>
<td>Voluntary Corporate Governance Buyers</td>
<td>Likely… Corporates would find this a powerful “CSR” model: “win-win” solution to tribal poverty and forest bio-diversity</td>
</tr>
<tr>
<td>Philanthropic Buyers</td>
<td>Certain… HNW and Foundations are waiting for such a product; small Euro-Indian “NGO-NGO” pilots have begun</td>
</tr>
<tr>
<td>A New Class of “Green Funds”</td>
<td>Likely… but needs model ‘returns’ proven (forest land values: Kyoto-II storage, eco-tourism, estates, etc) &amp; also needs marketing to end-investors</td>
</tr>
</tbody>
</table>
Thank You!