Forests, Livelihoods and Poverty Alleviation: Lessons Learned

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Global Forestry Challenges for the 21st Century

- Meet increasing demand for forest products
- Stem forest loss and degradation, and conserve environmental services
- Meet livelihood needs of rural people, especially in developing countries
Induced Innovation in Forest Resource Management

Figure 1 -- Induced Innovation in Forest Management

Source: Scherr (2000)
Structural Change in Global Forestry

- Technological efficiency in processing
- Industry concentration
- Intensification of production
- SFM and certification
- Demand for environmental services
- Changes in governance of resources
Models of Forestry Development

- Logging concessions on public lands
- Plantation development
- Ecological forestry
  (conservation/protected areas)
- Subsistence-oriented community forestry
- *Community-based forest production for the market*
## Forests and Livelihoods
(Adapted from Byron & Arnold 1999)

<table>
<thead>
<tr>
<th>LIVELIHOOD TYPE</th>
<th>MAIN LOCAL GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct forest dependence</td>
<td>Hunters, gatherers, herders, shifting cultivators</td>
</tr>
<tr>
<td>Forest commodity extraction</td>
<td>Artesans, traders, industrial workers, transporters</td>
</tr>
<tr>
<td>Farm inputs, supplemental food</td>
<td>Wealthier farmers, poorer farmers, landless workers</td>
</tr>
<tr>
<td>Non-food products</td>
<td>All</td>
</tr>
<tr>
<td>Environmental services, values</td>
<td>All</td>
</tr>
</tbody>
</table>
Contributions of Forestry Markets to Local Livelihoods

- Enhance value of natural assets (wealth)
- Increase stream of income
- Leverage other capital
- Diversify income sources & reduce risk
- Provide local employment, multipliers
- Provide incentive to protect environmental services
## Community Control of Forest Resources

Community Control of Forest Resources in Selected Countries
(official statistics)

<table>
<thead>
<tr>
<th>Country</th>
<th>Forest Area Under Community Tenure (million hectares)</th>
<th>% of Total Forest Area Under Community Tenure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papua New Guinea</td>
<td>25.9</td>
<td>97</td>
</tr>
<tr>
<td>Mexico</td>
<td>44.0</td>
<td>80</td>
</tr>
<tr>
<td>Peru</td>
<td>38.2</td>
<td>57</td>
</tr>
<tr>
<td>China</td>
<td>70.3</td>
<td>55</td>
</tr>
<tr>
<td>Colombia</td>
<td>24.5</td>
<td>46</td>
</tr>
<tr>
<td>Bolivia</td>
<td>19.4</td>
<td>37</td>
</tr>
<tr>
<td>Indonesia</td>
<td>30.0</td>
<td>16</td>
</tr>
<tr>
<td>Ecuador</td>
<td>19.2</td>
<td>16</td>
</tr>
<tr>
<td>Brazil</td>
<td>74.5</td>
<td>13</td>
</tr>
</tbody>
</table>

Relative Prices of Timber and Grain, 1961-1995

Figure 3.7 Relative Prices of Grain and Timber, 1960-97
## Growth of Agroforestry

### Importance of Trees on Farms in Selected Countries

(official statistics)

<table>
<thead>
<tr>
<th>Type of Agroforestry</th>
<th>Country</th>
<th>Area Under Agroforestry (million hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agroforests</td>
<td>Indonesia</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Other SE Asia</td>
<td>1.0 +</td>
</tr>
<tr>
<td></td>
<td>Sri Lanka</td>
<td>0.9</td>
</tr>
<tr>
<td>Tree Crop Plantations (with nurse trees)</td>
<td>China</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>Malaysia</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Indonesia</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>C. America</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Sri Lanka</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Philippines</td>
<td>0.2</td>
</tr>
<tr>
<td>Homestead, Farm forestry,</td>
<td>Thailand</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>Laos</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>C. America</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>Philippines</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Vietnam</td>
<td>0.1</td>
</tr>
<tr>
<td>Silvopastoral</td>
<td>Central America</td>
<td>9.2</td>
</tr>
</tbody>
</table>

- 50% of all tree cover or wood supply is from farms

- Bangladesh
- Kenya
- Pakistan
- Uganda
International Demand for High-Quality Timber

- Only market segment with large projected price increases
- Market opportunities:
  - Selective harvest in community-owned natural forests
  - Small-scale farm production of timber
Industrial Pulpwood Demand

- Paper demand high; pulp demand lower; low-cost competition

Market opportunities:
- Farmer outgrower schemes in densely-settled, forest-scarce countries
- Conversion of degraded community forestland to pulp plantations
Forest Products Produced in Developing Countries

Role of Developing Countries in Supply of Forest Products

- Pulp
- Wood
- Total Sawn
- Total Industrial
- Pulp and Paper
- Fuelwood

Percentage
Domestic Wood Consumption of Developing Countries
LDC Domestic Demand for Lower-Value Wood

Market opportunities:
- Communities near inland population centers (lower transport, market costs)
- Communities that partner with domestic firms to reduce production risk
- Communities who face lower cost structures for forest management
Demand for Certified Wood

- Consumer, investor demand
- Market opportunities:
  - Communities with high management and marketing capacity
  - Communities with direct links to wholesale or retail buyers
  - Communities with low certification costs
Demand for Selected NTFP’s

- Market opportunities
  - Commodities with rising domestic demand
  - High-value export commodities, suitable for on-farm domestication
  - Well-established export commodities for NTFPs that are difficult to domesticate
  - Low-income consumer goods
  - High-value niche markets
Demand for Environmental Services

Market opportunities

- Communities with forests (or potential forested areas) of high carbon sequestration value
- Communities whose forests have high watershed or biodiversity value to outsiders
- Communities obtaining external financial assistance for “re-greening” investments
- Biodiversity & habitat
Market Strategies for Community-based Forestry

Local People
- Forest Communities
- Small-scale farmers
- Landless people

New Market Opportunities
- Timber
- Pulpwood
- NTFP
- Environmental Services

Enabling Policy Environment
- New Business Strategies & Partnerships
- New Sources of Financing

Outcomes
- ✨ Supply
- ✨ Forest Conservation
- ✨ Poverty
Strengthen Community Land and Forest Rights

- Problem: local people lack forest rights
- Strategies to secure forest rights
  - Devolve forests to local control
  - Legalize local land ownership
  - Legalize local access to forests
  - Strengthen social criteria for certification
  - Design markets to recognize local rights
Remove Market Distortions

- Problem: Market distortions disadvantage local producers

- Strategies to reduce distortions
  - Simplify or remove harvest/transport rules
  - Simplify forest management plans
  - Develop & enforce contract standards
  - Facilitate environmental certification
  - Encourage competition, transparent prices
  - Design new markets to recognize local rights
Strengthen Voice of Local Producers

- Problem: Weak voice of local people
- Strategies:
  - Formalize role in ecosystem planning and management
  - Organize and lobby for policy action
  - Encourage direct communication and negotiation between communities and private sector
Business Factors Limiting Local Market Participation

- Vulnerability to livelihood risk
- Limited access to technology
- Limited formal business skills
- Scarcity of capital
- Weak bargaining position in the market
- High transaction costs
- Collective action problems
Improve Market Position

- Analyze the value chain
- Establish a competitive position
- Strengthen local producer organizations
- Improve technology
- Act collectively to overcome “gaps”
- Educate and attract potential buyers and partners
Forge Strategic Partnerships

- Community co-management of public forest
- Community groups or individuals contract public forest concession
- Private concessions in community forests
- Contract forestry on farmlands
- Joint investment (local groups and private companies)
- Pooled management of small parcels
Develop Support Services for Local Forest Business

- Business management services for local producers
  - “Honest brokers” for deal-making
  - Referral and consultancy services
- Technical assistance
- Market information
- Professional education
- Research for community-based forestry
Diversify Financing

- Buyers of forest products and environmental services
- Investors
Conclusions

- Major potentials for poverty alleviation
- Protect forests by increasing the value of forests for local people
- Pursue opportunities based on market trends
- Devolve public forests to local communities
- Reduce market distortions
- Encourage direct partnerships between private sector and communities
- Invest in institutional development for small-scale production