# Forest Conservation and Poverty Alleviation: Exploring the Evidence Base

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what, why and how"
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# Introduction

- Bruntland Commission popularized the idea of conservation and development as compatible objectives
- Millenium Development Goals re-emphasized poverty alleviation
- Substantial „effort to support "Forest Based Poverty Alleviation" (FBPA), but few big success stories
- New attention and $ to REDD adds new urgency to understand the real and potential relationship between forests and poverty
- Consider concept of "Forest based poverty alleviation" (FBPA)
- Role of forests in rural livelihoods – empirical evidence from PEN
- Forest products commercialization for FBPA – empirical evidence from comparative analysis of forest products cases
- Institution strengthening through forestry and natural resources management
- Research, project and policy needs

# Forest-Based Poverty Alleviation

3 main components:

1. Income Poverty Mitigation (prevent people getting worse off)
   - "safety net" - respond to emergencies
   - "current consumption" - regular subsistence-level income

2. Income Poverty Reduction (lifting people out of poverty)
   - generate surplus income, capital accumulation and reinvestment

3. Empowerment and improved capabilities
   - forestry, natural resources management as "entry point" for developing and strengthening local institutions and capacity building

Each implies different approaches for research, project and policy level interventions

# Forests and Poverty at Macro Scale

**Forestry => Poverty Alleviation**

- Forestry has limited potential for poverty alleviation at the economy wide scale (limited producer benefits, consumer benefits or labour absorption) (Wunder 2001)
- However, high rents attract corruption - effectively addressing corruption in the forestry sector could have national level implications in high-forest countries

**Poverty => Forest conservation**

- Ambiguous relationship between macroeconomic wealth creation and deforestation and forest degradation (Wunder 2001)

# Forest-Poverty Relationships at Micro Scale

1. Influence of poverty on biodiversity conservation
2. Influence of conservation activities on poverty
3. Opportunities and approaches to combine biodiversity conservation and poverty alleviation objectives

# Some rough numbers

- Three billion people live in rural areas of the developing world and half of those live on less than $2/day
- 735 million rural people live in or near forests and woodlands in the tropics
- 70 million live in remote areas of closed forests

(Chomitz et al 2007)

# Forests, Poverty and Remoteness

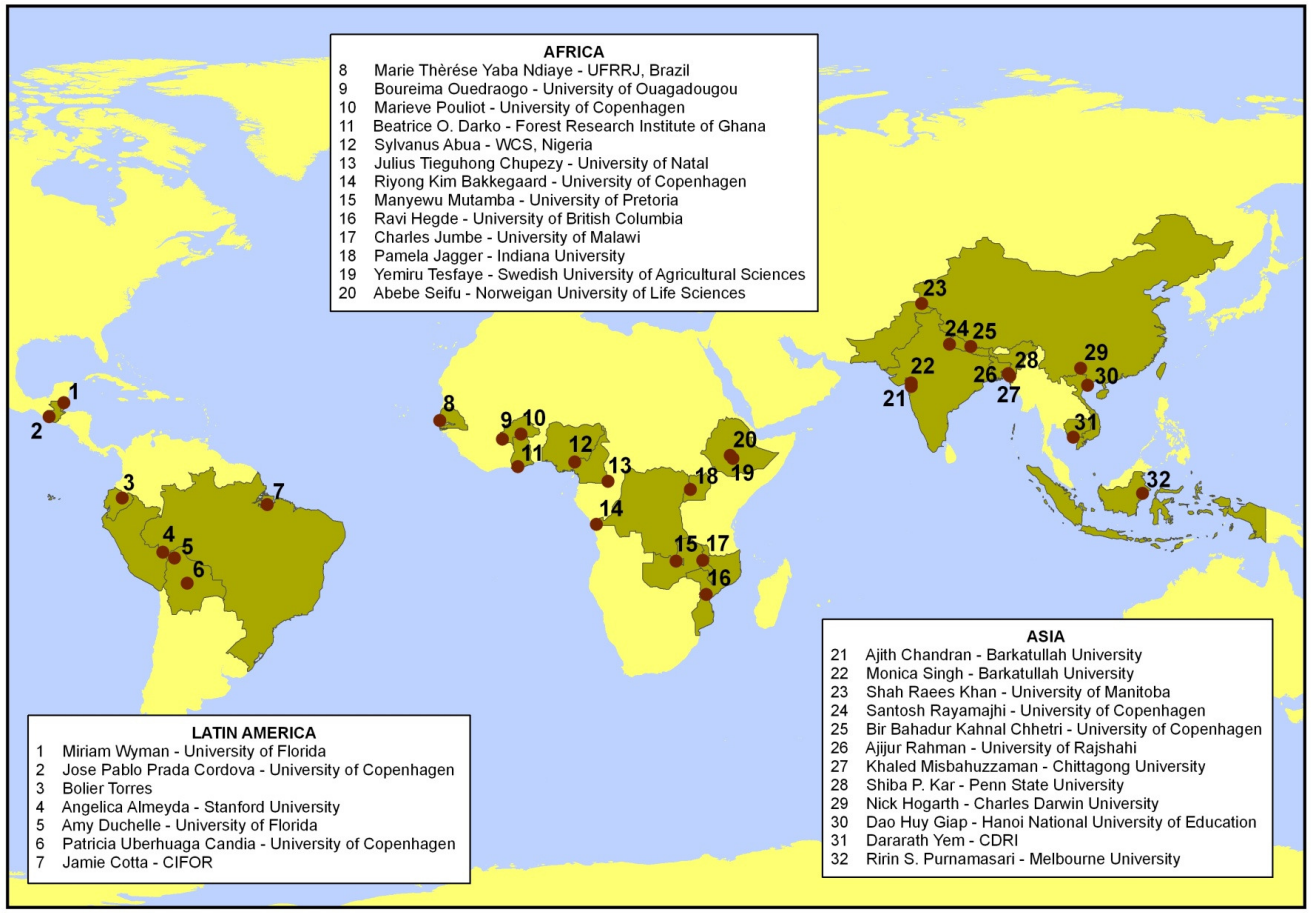
Forests and high poverty rate (proportion of people that are poor) converge because:

- Remote (poor transport infrastructure)
- Steep topography
- Poor soils
- Limited agricultural potential
- Little alternative employment or income
- Low incomes
- Indigenous, migrant, or otherwise marginalized people, little voice (compounds problems)
- Limited political power, social capital
- Limited government support (lack of reach, neglect)
- Poor education, health care - low "human capital"
- Open access, low barriers to entry
- etc

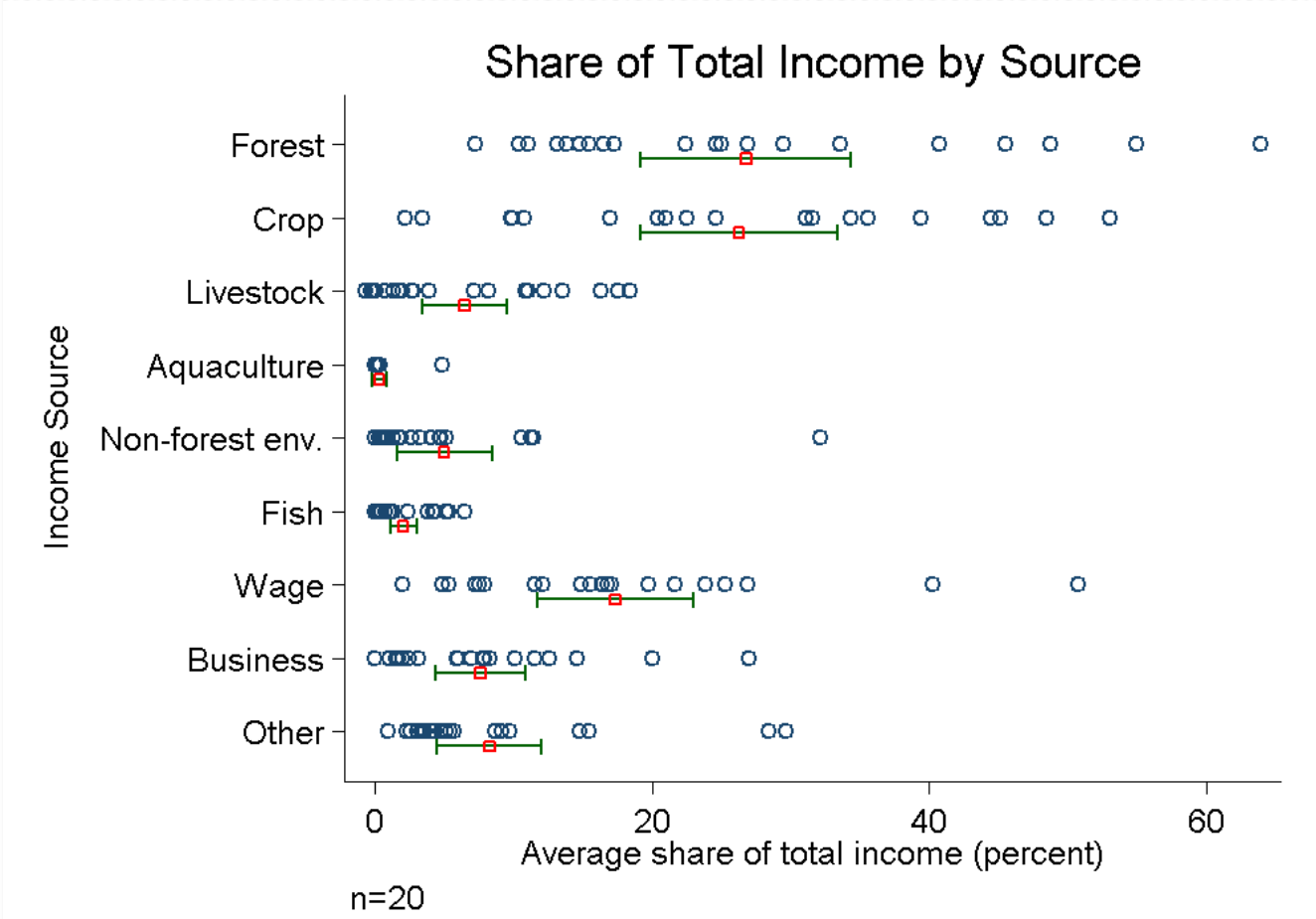
# Poverty and Environment Network

- 38 studies in 26 countries
- 240 households in the average study
- 360 villages or communities (>9,000 hh)
- Standardised quarterly surveys record all forest, environmental and other income sources

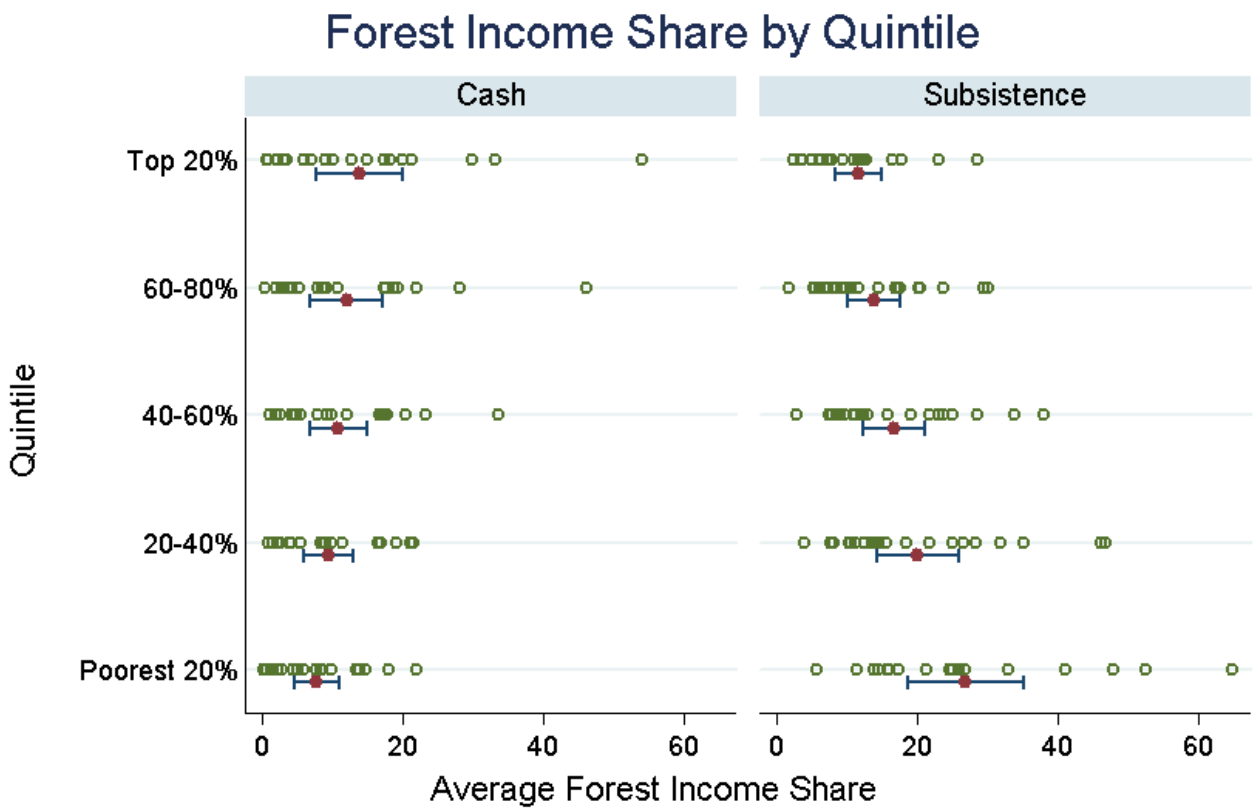
# PEN Study Sites



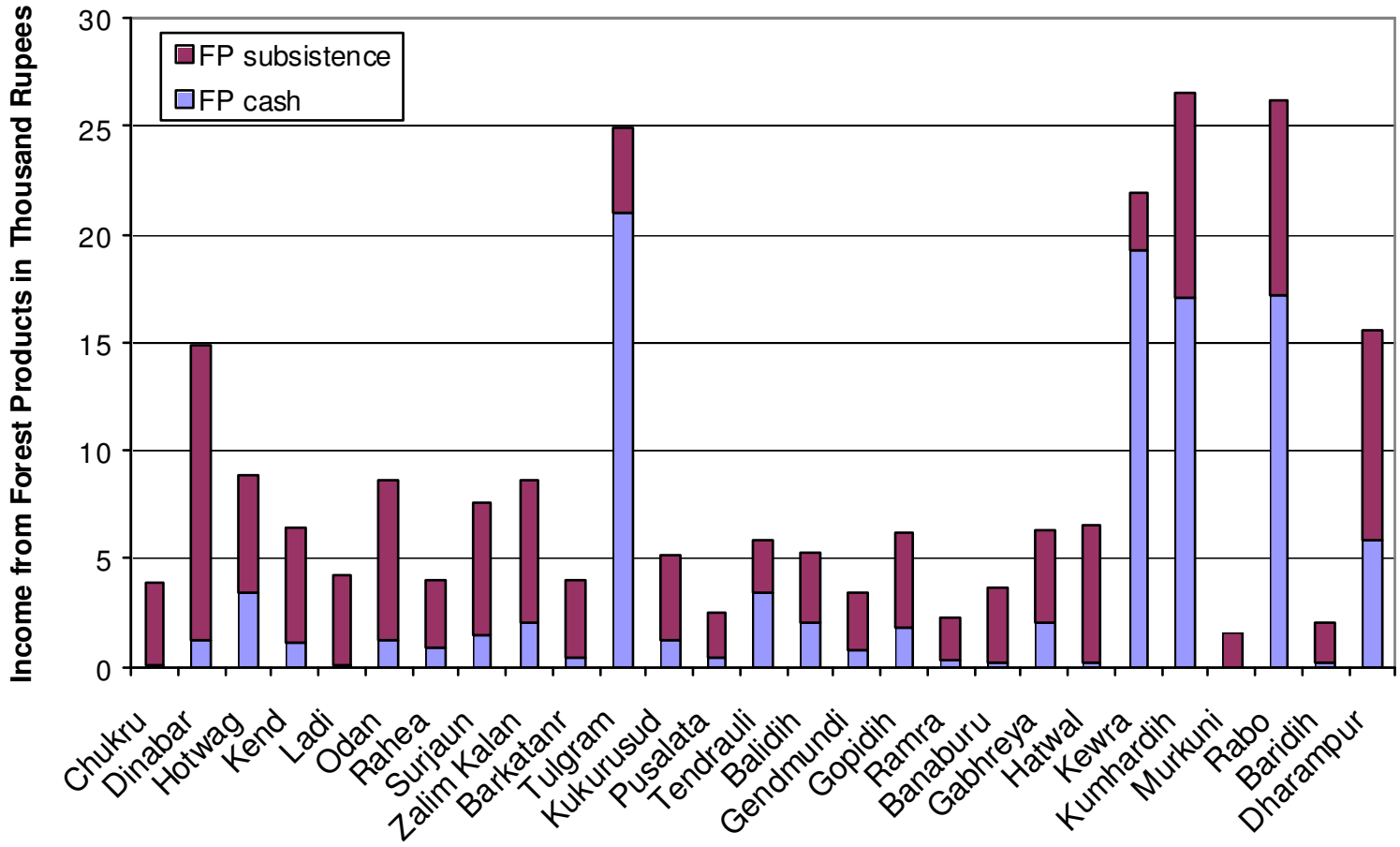
# Forest Contribution to Income (preliminary data - not for citation)



# Forest Contribution by Income Group (preliminary data - not for citation)



# Average HH Forest Income: Jharkhand, India (not for citation)



# Preliminary PEN Findings

- Large variation across sites, villages and households
- On average, 25% of hh income is from forests
- Poor households depend relatively more on subsistence forest products
- Better-off households have higher relative and absolute cash income from forest products
- "Safety net" role is less pronounced than expected

# Influence of Poverty on Biodiversity

- Swidden cultivation sustainable with low pop.
- Subsistence and especially commercial use can lead to local over-exploitation of valuable species
- Poor typically lack the authority and the resources for large-scale forest clearing (important implications - weakens the premise that forest based enterprises can create incentives for conservation)
- Richer farmers are better able to finance deforestation
- Good land is cleared first
- Higher prices for farm products induce forest conversion and benefit farmers

# Influence of conservation on poverty

- Relocations and restrictions on use directly reduce available land and resources
- Additional labour costs and responsibilities
- Makes customary activities "illegal"
- Cultural costs as people are "decoupled" and excluded from areas they used previously (Hoole and Berkes 2009)
- Increasing concern that REDD policies might negatively impact rights and governance structures of Indigenous and other forest-dependent peoples

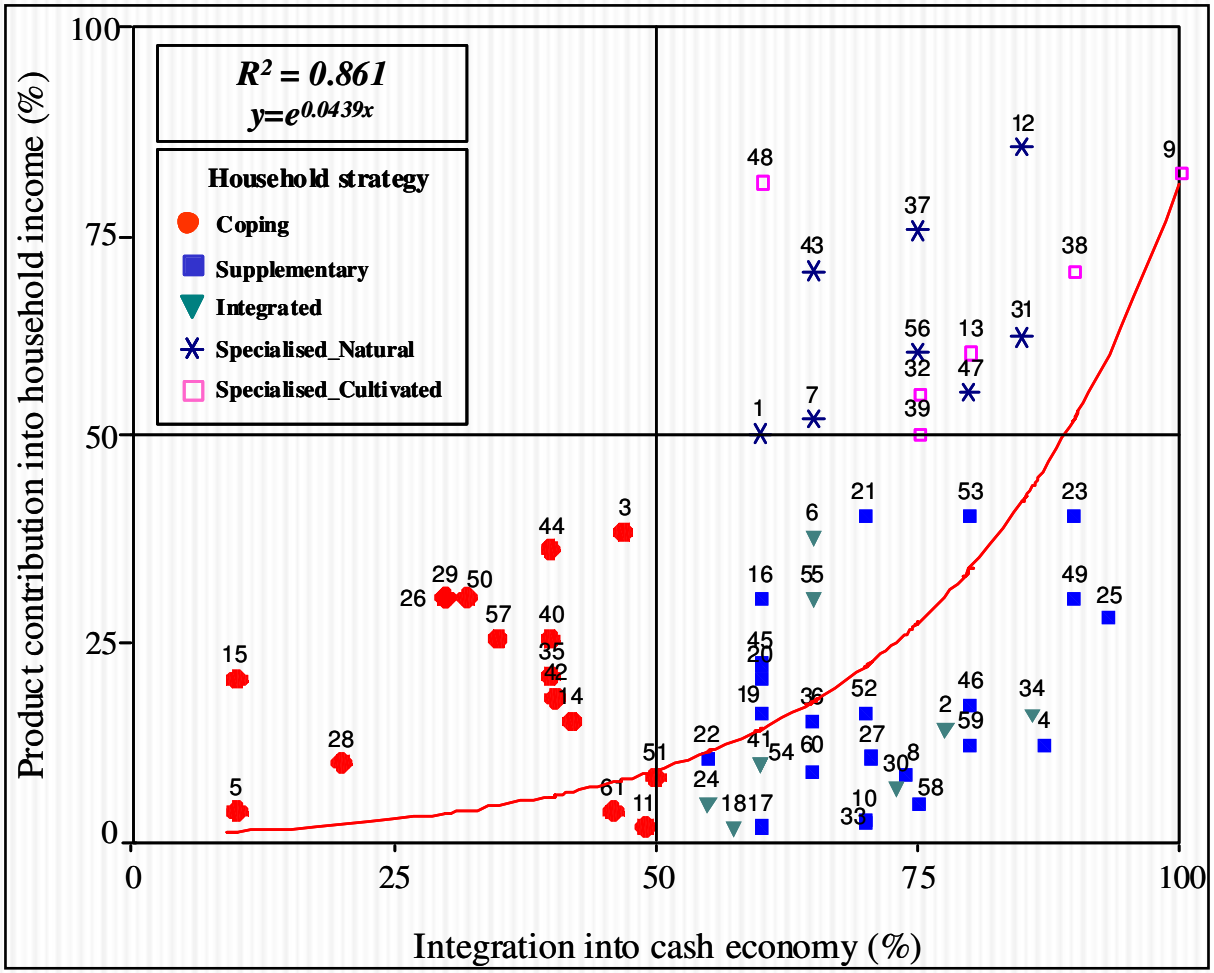
# Influence of conservation on poverty

- Medium- to longer term increases in natural capital, productivity
- Direct and indirect employment
  - Planting, guarding
  - ICDP-type activities
  - Ecotourism
  - Small-scale, labour-intensive forestry
- Infrastructure (physical capital)
- Education, health-care investments (human capital)
- Institutions, governance (social capital)

# Forest products

- Two main categories - Timber and Non-timber (a false dichotomy)
- NTFPs have been focus of livelihoods and rural development discussions for 3 decades - why?
  - accessible
  - appropriate technology
  - low barriers to entry
  - actual use/dependence high
  - assumed low impact
- But, many (NOT ALL!) have low value, low competition, low potential

# NTFP Case Comparison




(From Belcher at al 2005)

# NTFP Case Comparison Findings

- Product is less important than the social and economic context
- Key context variables are:
  - property rights
  - size and accessibility of markets
  - "opportunity cost" of labour and land
- Higher incomes associated with:
  - intensified production of higher value products
  - off-farm income
- Commercial FP production integrated with other economic activities
- Inherent paradoxes?
  - conditions for commercialization are not met in poor areas
  - process of commercialization may have an anti-poor bias
  - Intensification may have negative biodiversity implications
- Important constraints exist outside the forest product sector
- Realizing development potential also requires investments in other areas

# Timber

- Typically out of reach of poor:
  - capital-intensive; economies of scale
  - political economy
  - corruption
- New realities, attitudes and mechanisms create new opportunities
- E.g. Mexico "Ejidos"; increased engagement by First Nations in commercial forestry in Canada

# Equity in Community Forestry
## (McDermott & Schreckenberg 2009)

- Reduces inequality when it explicitly targets the poor and marginalized (needs to be an explicit goal)
- Expands decision making space, enabling change and benefit capture
- Poor and marginalised can increase benefits by actively participating
- Community level benefits more important than direct hh or individual benefits
- Cannot fix all structural inequities, but can equip communities with resources and capacity to challenge inequities

# Conclusions and recommendations

- Large knowledge gaps remain, especially about:
  - Current role of forests in livelihoods
  - Actual livelihood impacts (positive and negative) of conservation activities
- Need better definition and better reporting of income and livelihood assessment
- Need more explicit impact pathways and better monitoring of outcomes and impacts in conservation and NRM-based development projects
- Forests are important and will remain important in income poverty mitigation. Increases in natural capital can be valuable in this way.
- Role for forestry for income poverty reduction is limited
- PES may change the economics enough to permit low-intensity management of forests
- Greater potential exists in other aspects of livelihoods (social, human, physical) - conservation projects should be more deliberate and focused in supporting these aspects