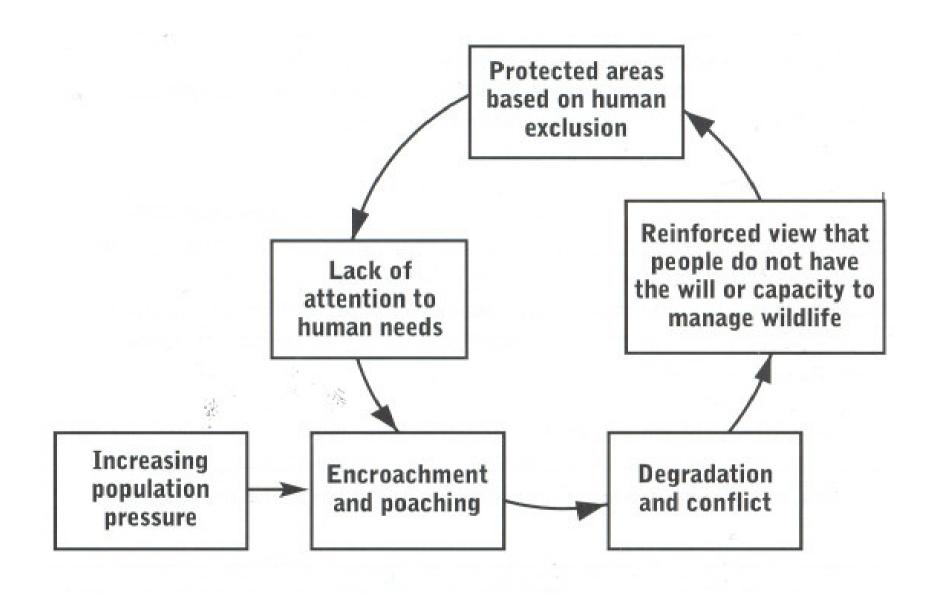
## Community-based Approaches for Linking Conservation and Livelihood Objectives

FIKRET BERKES
UNIVERSITY OF MANITOBA

#### Context

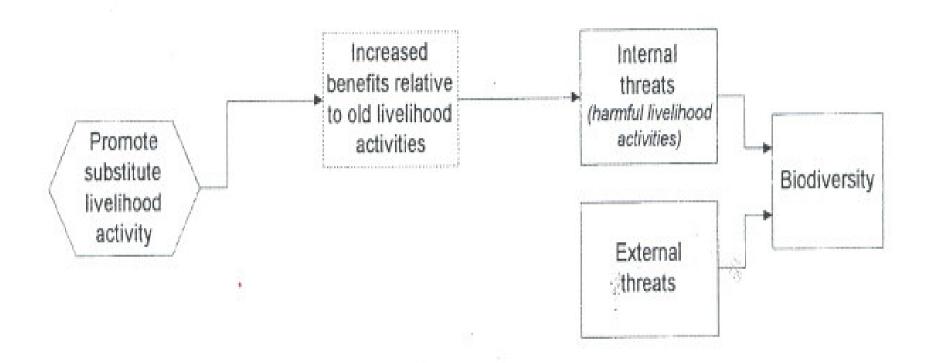
#### Conserving biodiversity depends on

- Understanding the interactions of societies and the environments in which they live, and
- Understanding what motivates people to conserve
- Most of the world's biodiversity is not in PAs but on lands and waters used by people for their livelihoods
- Therefore, partnership with local people needed for long-term conservation
- Solution is to break the vicious cycle that leads to the failure of both conservation and livelihoods



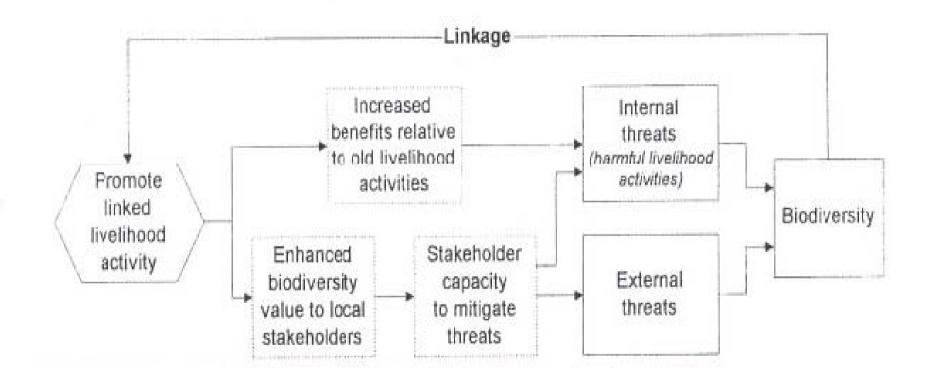
Source: Roe et al. 2000. Evaluating Eden. IIED.

#### (b) Indirect Linkage: Substitution Strategy



Source: Salafsky, N. and E. Wollenberg 2000. World Development.

#### (C) Direct Linkage: Linked Incentives Strategy



Source: Salafsky, N. and E. Wollenberg 2000. World Development.

## Objectives

- How do we do a better job with the linked incentives model to provide conservation incentives?
- Objective here is to seek a better understanding of the nature of incentives, and the benefits that the communities themselves consider important: what makes the local people want to conserve resources?
- The focus is on community benefits it can be seen as a range of benefits, a more useful way of exploring the issue

## Definitions: "poverty reduction"?

- Much of the conservation literature focuses on the monetary benefits of conservation as if following the "income-poverty model" of the 1960s
- More recent definitions of poverty are broader: "poverty encompasses different dimensions of deprivation that relate to human capabilities including consumption and food security, health, education, rights, voice, security, dignity and decent work" (OECD 2001, p. 8)

## Cases from the UNDP Equator Initiative

- Since 2002, UNDP EI has held biennial searches to find and reward entrepreneurship cases that seek to reduce poverty and conserve biodiversity at the same time
- The program focuses on the equatorial region because of its richness of biodiversity and abundance of poverty
- Ten cases were selected for detailed field studies; results analyzed here for community objectives and benefits
- The benefits identified account for the evolution of the case over the years; they are not based on the original project objectives as listed in UNDP EI database

#### Kinds of benefits in UNDP EI cases

- Economic benefits: cash compensation or entitlements, employment opportunities, livelihood diversification, access to funding and credit, and market-related benefits
- Environmental benefits: reversing resource declines; restoring biological productivity; protection of species and habitats important for livelihood resources
- **Political benefits:** empowerment, including participation in decision-making; control of local or traditional lands and resources; better relations with government
- **Social benefits** include improvements in social, educational and health services, and in social organization
- **Cultural benefits:** strengthening or revitalizing cultural traditions and cultural identity; values; community cohesiveness

Case	Economic	Environmental
Rural communes medicinal plant conservation	XXX	XXX
centre, Pune, India		
Arapaima conservation in the North Rupununi,	XX	XXX
Guyana		
Honey Care Africa's beekeeping in Kakamega	XXX	X
and Kwale, Kenya		
Cananeia Oyster Producers Cooperative, Sao	XXX	XX
Paulo, Brazil		
TIDE Port Honduras marine reserve, Belize	XX	XXX
Pred Nai community forestry group	XX	XXX
mangrove restoration, Trat, Thailand		
Casa Matsiguenka indigenous ecotourism	XXX	
enterprise, Manu National Park, Peru		
Nuevo San Juan forestry management	XXX	XX
enterprise, Michoacan, Mexico		
Wildlife management, Torra Conservancy,	XXX	XX
Namibia		
Pastoralist integrated support program (PISP),	XX	XX
Kenya		

Case		
Rural communes medicinal plant conservation		
centre, Pune, India		
Arapaima conservation in the North Rupununi,		
Guyana		
Honey Care Africa's beekeeping in Kakamega		
and Kwale, Kenya		
Cananeia Oyster Producers Cooperative, Sao		
Paulo, Brazil		
TIDE Port Honduras marine reserve, Belize		
Pred Nai community forestry group		
mangrove restoration, Trat, Thailand		
Casa Matsiguenka indigenous ecotourism		
enterprise, Manu National Park, Peru		
Nuevo San Juan forestry management		
enterprise, Michoacan, Mexico		
Wildlife management, Torra Conservancy,		
Namibia		
Pastoralist integrated support program (PISP),		
Kenya		
Kenya		

Г

Political	Social	Cultural
XX	XX	XX
XXX	XX	X
	X	
X	XX	
XX	X	
XXX	XX	
XX	XX	X
XXX	XX	X
XX	X	
X	XX	XX

-

7

# Community objectives in more detail: two UNDP EI cases; two other Southern and two Northern cases

Rural commune's medicinal plant conservation centre, Pune, India:

- *in situ* conservation and sustainable use of medicinal plants;
- low cost local medicinal plant availability in poorer regions;
- income for women collecting and marketing;
- sense of ownership of local resources and conservation partnerships;
- revitalization of cultural traditions

#### Community objectives in more detail, 2/6

Casa Matsiguenka indigenous ecotourism enterprise, Manu National Park, Peru:

- compensation for restrictions on traditional hunting and other livelihood activities inside the Park;
- ecotourism for alternative livelihood and jobs;
- way of defending rights and fighting commercialization of natural resources by outsiders;
- community pride and social benefits

### Community objectives in more detail, 3/6

Peixe Lagoon National Park, Rio Grande do Sul, Brazil:

- fight eviction from the Park;
- getting voices heard;
- empowerment to defend rights, preserve livelihoods and access technical assistance;
- recognition of fishers' role in maintaining ecology of Park;
- job opportunities inside the Park

#### Community objectives in more detail, 4/6

Ehi-rovipuka Conservancy, adjacent to Etosha National Park, Namibia:

- economic benefits of wildlife use and ecotourism;
- employment;
- meat from wildlife;
- a vehicle for community organization and empowerment;
- participation in wildlife management

### Community objectives in more detail, 5/6

Paakumshumwaau-Maatuskaau Biodiversity Reserve, Cree Nation of Wemindji, Quebec, Canada

- biodiversity and landscape conservation;
- security from hydro-electricity development threat;
- biodiversity and landscape conservation to safeguard traditional lifestyle;
- reaffirming land and resource rights;
- community identity, cohesion and cultural values

#### Community objectives in more detail, 6/6

Whitefeather Forest, Pikangikum First Nation, NW Ontario, Canada:

- elders' wisdom to take care of the land;
- economic and employment opportunities through resource-based tribal enterprises;
- management that harmonizes indigenous knowledge and practice with western science;
- strong culture through healthy economy

#### Conclusions - 1

- Community objectives that create incentives for biodiversity conservation are complex
- They can be sorted into economic, environmental, political, social and cultural objectives, but they are inter-related
- There is almost always a mix of community objectives
- But the mix is case-specific, making it impossible to design "blueprint" solutions
- These objectives cannot be characterized as "poverty reduction" in the old income-poverty sense

#### Conclusions - 2

- In many cases, political, social, cultural objectives can be very important – more important than cashoriented objectives
- In particular, with indigenous groups, the political objective of control of traditional territories and resources are of prime importance -- seen as the first step to social and economic development
- Even with non-indigenous rural groups, empowerment is almost always a prime objective

## Conclusions: cross-cutting issues

- It is very difficult to establish the actual beneficiaries of poverty alleviation at the community level
- The evidence for conserving biodiversity is mixed:
  - No universal biodiversity conservation in the cases
  - Many projects aim to restore livelihood resources
  - Some projects lead to ecosystem conservation
  - Projects lead to stewardship, sense of ownership
- Measuring poverty and conservation outcomes are very problematic for (a) lack of baseline data, (b) contested nature of concepts

## Acknowledgements

- This paper was prepared with the help of the case study material collected by Damian Fernandes, Jessica Herrera, Arthur Hoole, Stephane Maurice, Dean Medeiros, Alejandra Orozco-Quintero, Lance Robinson, Jason Senyk and Shailesh Shukla
- Photo credits: Jessica Herrera, Tiago Almudi, Arthur Hoole, Catie Burlando
- The International Development Research Centre of Canada (IDRC) and the Canada Research Chairs program supported the various projects.