

# Biodiversity and Poverty: a political perspective

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*Linking Biodiversity Conservation and Poverty  
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## Biodiversity conservation and poverty alleviation in the new Millennium

- Hard times for win-win
- 'linking conservation and development objectives is in fact extremely difficult, even at a conceptual level' (Brandon and Wells 1992 p. 567)

## Conservation and the focus on development

‘excessive emphasis on development can lead to a de-emphasis of conservation goals to the extent that they are no longer seriously addressed’ (John Oates, 1999, *Myth and Reality in the Rainforest*, California University Press)

‘In its new incarnation, poverty alleviation has largely subsumed or supplanted conservation. This trend has gone largely unnoticed, but poses a significant threat to conservation objectives’ (Steven Sanderson and Kent Redford, 2003, *Oryx* 37: 389-90)

### Elephants, livelihoods, conservation and poverty.....

#### Human-Elephant Conflict, Kenya

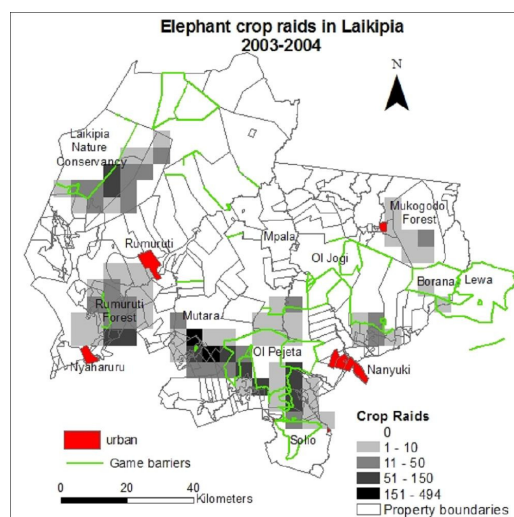
- Elephant numbers and human population increasing
- Agriculture extending into drylands
- Human-elephant conflict widespread in time and space
- Lack of capacity, resources, options to control HEC

## Human-elephant conflict

- Direct impacts
  - Crop damage
  - Damage to property
  - Human deaths and injuries
- Indirect impacts of crop defence
  - Children's school performance
  - Disease: malaria
  - Conflict communities / government
- Responses
  - Killing/injuring elephants
  - Support for poachers

## Sharing land with elephants:

### Laikipia, Kenya



## The Problem 1: Poverty

- Progress towards MDG 1: halve extreme poverty by 2015
- Chronic Poverty: even if 2015 Goals are met in full, c. 900m people will remain poor, mostly in Sub-Saharan Africa and South Asia

## The Problem 2: Biodiversity

- HANPP: 32% (locally and regionally greater)
- People 0.5% of animal biomass on Earth
  - Rojstaczer *et al. Bioscience* 2001; Imhoff *et al. Nature* 2004,
- 75% habitable earth disturbed by human activity
  - Lee Hanna *et al. Ambio* 1994)
- ‘the rates, scales, kinds and combinations of changes occurring now are fundamentally different from those at any other time in history; we are changing the earth more rapidly than we are understanding it’
  - (Peter Vitousek *et al. Science* 1997)

## The Problem 3: Synergy

- Locally:
  - Poverty as a driver of biodiversity loss (e.g. poaching, habitat destruction), **But** conservation action as a driver of poverty (e.g. land lost to parks, crop raiding)
- Regionally:
  - oil palm versus old growth forest
  - development projects and downstream environmental harm
- Globally:
  - unsustainable patterns of resource use, consumption, wastes.

## The Dream: Community Conservation

- ‘Conservation will either contribute to solving the problems of the world’s poor who live day to day with wild animals, or those animals will disappear’
  - Adams J.S. and McShane T.O. (1992) *The Myth of Wild Africa: conservation without illusion.*
- Protected Area Outreach
- ICDPs (Integrated Conservation and Development Projects)
- CBNRM (Community-based Natural Resource Management)

## The 'New Conservation'

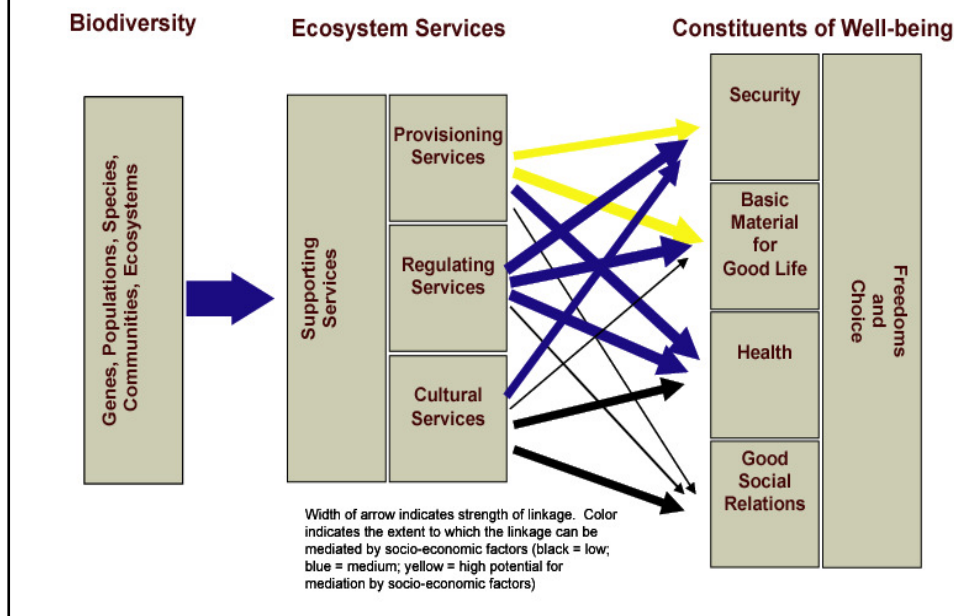
(Hulme and Murphree 2001)

- **Community:** Moves conservation from state-centred to society-centred activity, particularly society at the local level: 'community' conservation, or 'community-based conservation'.
- **Development** Moves conservation from a concern with preservation to sustainable development, where *both conservation and development goals are achieved* at the same time.
- **Market:** Moves conservation from a concern to protect nature *from* the market to a concern to achieve conservation *through* the market: *neoliberalism*

## Policy as if nature mattered: Ecosystem Services

- Provisioning Services
  - Food, freshwater, fuel
- Regulating Services
  - Climate, disease, water
- Cultural Services
  - Spiritual, recreation, education
- Supporting Services
  - Nutrient cycling, primary production
- *Millennium Environmental Assessment*
- 150 m people have 'significant dependence' on wildlife (forests, wild meat, tourism) for food security and livelihoods (DFID 2002)

## The Millennium Ecosystem Assessment model



## Push-back 1: Conservation's Impacts on the Poor

- 'Poor people should not pay the price for biodiversity protection' (Dilys Roe and Joanna Elliott, 2004, Oryx 38: 137-9)

## Costs of Conservation: Displacement

- Population displacement
  - Lost homes, land or resources
  - Lost opportunity for future use of land or resources
  - Loss of non-use values (e.g. religious, cultural)
- Data
  - evictions from protected areas offers ‘a massive cataloguing of past, recent and ongoing abuses’ (Borgerhoff-Mulder and Coppolillo (2005) *Conservation: Linking Ecology, Economics, and Culture*, Princeton University Press, p. 36)
- – ‘the evidence necessary to answer the question as to how many people have been displaced or negatively affected by conservation is simply not there; it has not been collected either by those that criticize conservation, or by conservationists themselves’ (Curran et al. 2009 *Conservation and Society* 7(1): 30-45)

## Dealing with the Social Impacts of Protected Areas

- Pay the full social cost of protected areas (what institutions for financial transfers from industrialised to developing world?)
- Social Impact Assessment of all projects
- Corporate Social responsibility of NGOs
- Social Ownership of Parks

## Push-back 2 Does integration work?

- Integrated conservation and development projects (ICDPs)
- Development doubts:
  - Cost-effective?
  - ICDPs are '*no more than short-term palliatives*'
    - Barrett and Arcese 1995 *World Development*, p. 1081.
- Conservation doubts:
  - Cost-effective?
  - 'excessive emphasis on development can lead to a de-emphasis of conservation goals to the extent that they are no longer seriously addressed' (John Oates, 1999, *Myth and Reality in the Rainforest*, California University Press)

## Community-based conservation

- 'CBC has to date not been tried and found wanting; it has been found difficult and rarely tried'
  - Marshall Murphree (2000) '*Community-based conservation: the new myth?*', unpublished paper to Conference on African Wildlife Management in the New Millennium, Mweka. December 2000.

## Push-back 3: Back to the barriers?

- Resurgence of the ‘protectionist paradigm’ (Wilshusen et al. 2001)

## Barriers

- ‘human life and the wild life must be separated permanently and completely. So long as man and animals live together there will always be trouble’
  - Richard Hingston 1931,  
*Geographical Journal* p. 406

## Strategies: Beyond barriers?

- ‘Perhaps the greatest challenge of all is to change the way we think about protected areas. In the past they have been seen as islands of protection in an ocean of destruction. We need to learn to look on them as the building blocks of biodiversity in an ocean of sustainable human development, with their benefits extending far beyond their physical boundaries’

– Achim Steiner *New Scientist* 18 October 2003, p.21

## 1. Conservation-based poverty reduction

- ‘pro-poor conservation’, where conservation-based natural resource management strategies are used as a tool for poverty reduction and social justice.
- Strategies of sustainable use of living resources allow optimisation of economic return and/or impacts on poorest people.
- e.g. CBNRM, fisheries management; local CPR management.

## 2. Livelihood-linked conservation

- conservation can and should contribute directly to local livelihoods and generate positive benefits for local communities
- Conservation is still the overall objective but programmes are designed to generate maximal benefits for poor people.
- e.g. resource-sharing (or revenue-sharing) in protected areas or their 'buffer zones' (e.g. wildlife tourism), and CBNRM that is constrained within conservation limits (e.g., CAMPFIRE).

## 3. Poverty neutral conservation

- the net impact of conservation on the poor should be neutral
- conservation can have negative impacts on the poor, and should compensate fully for local opportunity costs of protected areas or laws that constrain resource use.
- e.g. ICDPs, revenue sharing; 'community-based conservation' approaches. Global institutions for raising money from First World conservation advocates to pay local costs of conservation in the Third World.

## 4. Win neighbours as friends

- Poverty is a constraint on conservation success
- Therefore poverty needs to be addressed in order to deliver on conservation objectives.
- Tackle the poverty of neighbours and others who have the power to disrupt conservation programmes (e.g. those who might poach or encroach on parks).
- e.g. 'park outreach strategies e.g. service provision, employment, and the provision of information under the rubric of 'participation'

## 5. Clean hands

- conservation and development are distinct problems, which should be maintained as distinct sectors of policy concern.
- Only engagement with poverty issues where there are clear 'win-win' opportunities that do not compromising conservation goals.
- 'strong barriers'

## The challenge of Conservation and Poverty Reduction

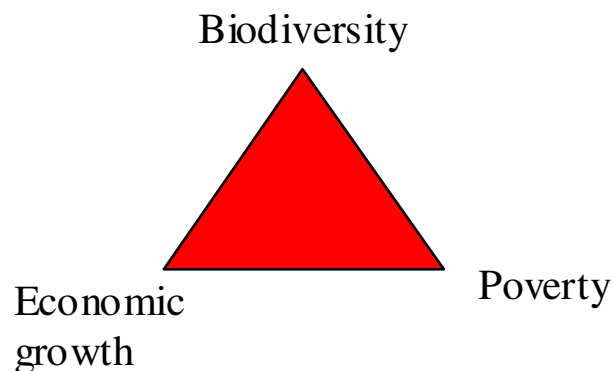
- Difficult:
  - solutions are elusive
  - skills are limited
  - Optimism rules sublime
- Expensive
- Complex to plan
- Slow to have the effects desired of them
- Outcomes hard to predict and often controversial

## The political challenge

- Generate losers as well as winners
- Resource access: choices among the poor, or between more and less poor
- Trade relations: poor and rich countries, poor and rich in different countries
- Biodiverse and urbanised/industrialized environments
- Southern biodiversity and northern conservationists
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## The Heart of the matter: Conservation and Development

- Win-win solutions?



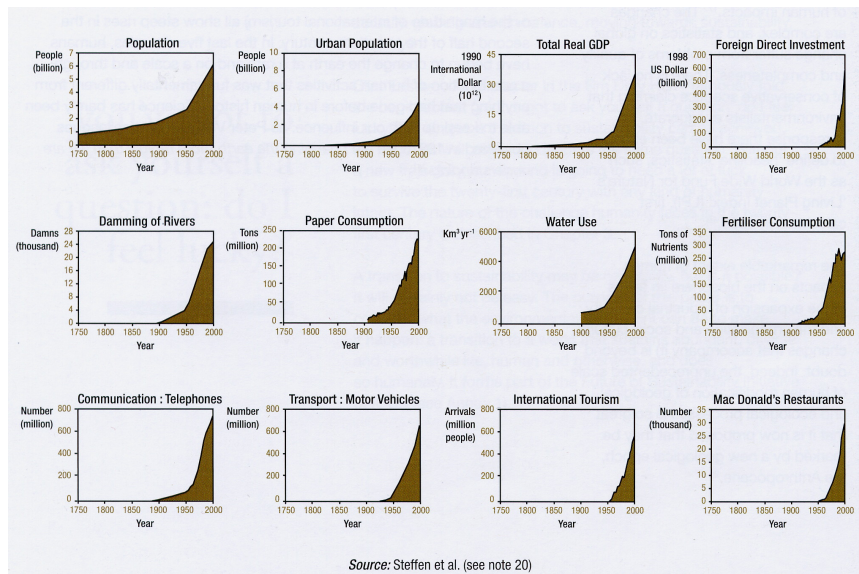
## Conservation and Environmentalism

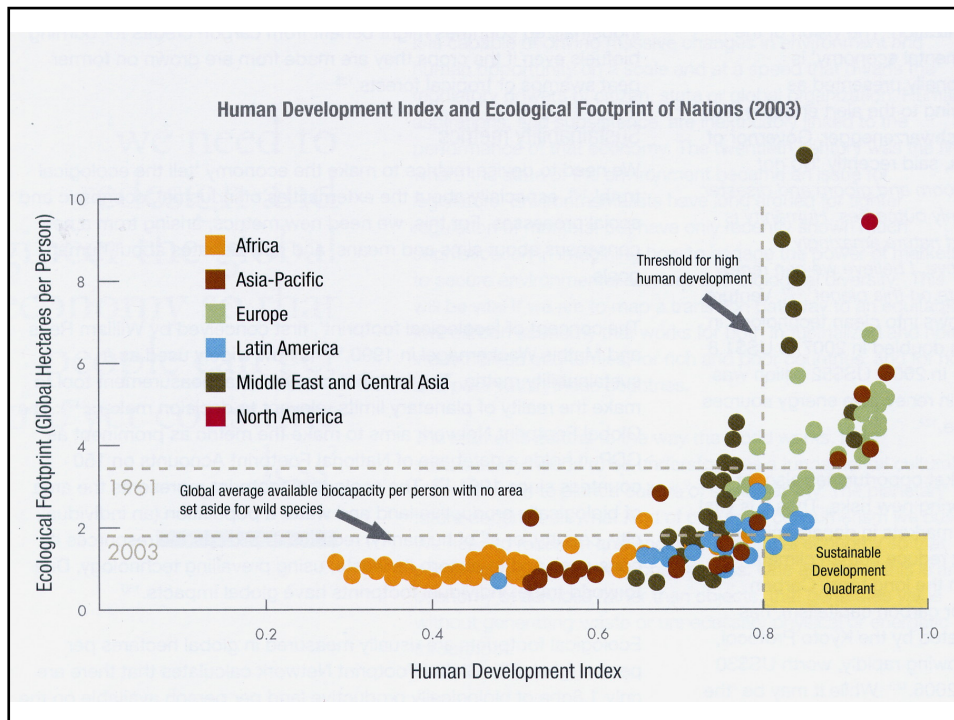
- 'But man is everywhere a disturbing agent. Wherever he plants his foot, the harmonies of nature are turned to discords. The proportions and accommodations which ensured the stability of existing arrangements are overthrown' ( p. 36)
  - Marsh (1864) *Man and Nature*
- 'Man's attitude toward nature is today critically important simply because we have now acquired a fateful power to alter and destroy nature. But man is a part of nature, and his war against nature is inevitably a war against himself...'
  - Rachel Carson 1962 *Silent Spring*

# Sustainable Development

- A dynamic process which enables all people to realise their potential and improve their quality of life in ways which simultaneously protect and enhance the Earth's life support systems
  - Forum for the Future [www.forumforthefuture.org.uk](http://www.forumforthefuture.org.uk)

## Surviving the *Anthropocene*





## The Challenge of sustainability

1. Decarbonise the world economy
2. Commit to a path of justice and global equity
3. Protect the biosphere.

## Questions

- how many species do we need in different ecosystems before they start to unravel?
- how many species are there and what they do in terms of ecosystem function?
- how brittle are ecosystems (rivets or chess pieces)?
- what are we going to need tomorrow?
- how to we deal with the wider ignorance and short sightness of planners and resource users?
- how to deal with outright selfishness of capitalism?
- how to take hard decisions (the tragic farce of consumer, capitalist, voter, politician)?

## Conservation from Above?

- 'Academic researchers, conservation non-governmental organizations and other 'foreign' interests tend to be better informed, less subject to local political influence and more experienced in conservation planning than local agencies'.
- 'Local agencies' capabilities are likely to be even more of a problem in developing countries. Letting them set the conservation agenda by themselves could therefore be a mistake'.
- Academic researchers, conservation non-governmental organizations and other 'foreign' interests tend to be better informed, less subject to local political influence and more experienced in conservation planning than local agencies.
- Reed Noss (2010) 'Local priorities can be too parochial for biodiversity', *Nature* 463, 424

## Conservation by the people?’

- ‘Slowly, and sometimes reluctantly, we have come to accept that people count, and thus have reached the stage of *conservation with the people*....But we reserve to ourselves the status of being the final arbiters of what CBC should be, based on our science and professional experience’. ‘We need to move onto a fourth stage, *conservation by the people*’.
  - Marshall Murphree (2000) ‘Community-based conservation: the new myth?’, unpublished paper to Conference on African Wildlife Management in the New Millennium, Mweka. December 2000.