The Promise and Pitfalls of Community-based Rangeland Conservation

Conservation and livelihoods in the ‘middle of somewhere’

Robin Reid

Center for Collaborative Conservation, Dept of Forest Range and Watershed Stewardship, Dept of Human Dimension of Natural Resources, Natural Resource Ecology Lab, Colorado State University
Where we are going today

• The debate and some definitions
• What are the keys to success and new opportunities?
• How about the recurring challenges?
• Prospects for the future?
The debate

The death of nature

• Species loss is so rapid that we need to expand protected areas as quickly as possible

• If only 0.25% of the poor live in areas with high conservation value, why should conservation pay attention to livelihoods?

Violation of human and land rights

• Industrial capitalism is driving the expansion of ‘fortress conservation’, displacing people to conserve the environment and violating human and land rights

Terborgh (1999), Redford et al. (2008), Brockington et al. (2008)
Our focus

‘Asking whether community-based conservation works is the wrong question. Sometimes it does and sometimes it does not. Rather, it is more important to learn the conditions under which it does and does not work.’

Berkes (2004), p. 624
Some definitions

• **Communities**: multidimensional, cross-scale, socio-political units or networks changing through time

• **Community conservation**: Conservation at the local level that attempts to align conservation and livelihood goals for the benefit of local groups

• **Collaborative conservation**: Conservation that crosses boundaries and thus brings together diverse stakeholders to work towards a shared vision and agreed actions on large landscapes

Carlsson (2000)
The challenges of community-based and collaborative approaches

- Messy, negotiation often needed
- Complex problems, resources and communities
- Alignment of conservation and livelihoods goals often difficult
- Devolution of power required
- Rapidly changing world
- Long-term commitment often needed
- Lots of other un-related problems take precedence
- Everyone likely has to give up something
Keys to success:
1. Redefining conservation to put people at the center

• Aligns livelihood goals (like profit, cultural values) and conservation goals for local benefit

• Like conserving trees as resting places for livestock and also as centers of biodiversity

• Like recognising that access to public lands for ranchers in the US helps slows conversion of working ranches into sub-divisions

• Like paying herders to devise ways to conserve carbon, rare species habitat, clean water

Keys to success:
2. Starting and ending with local perspectives and knowledge (applies to research too)

- True community conservation is initiated by community members, not by outsiders
- Focuses on issues of local interest and concern
- Research in this setting is driven from local perspectives and returns information to communities
Roles of pastoralists and scientists in joint co-created research projects: An example from east Africa

Pastoralist roles:
- Summarize local knowledge about problem
- Build community team and support
- Interview long-term residents about results
- Discuss results with communities and others

Scientist roles:
- Summarize scientific knowledge about problem
- Design data collection, train team
- Analyze data, make analysis accessible
- Discuss results with scientists and others

Co-creation roles:
- Co-develop hypotheses
- Co-collect data, co-create boundary objects
- Co-interpret results, co-create lay-person communications
- Discuss results with policy makers, private sector, others

Reid (2008)
Keys to success:
3. Integrating diverse viewpoints when managing landscapes that cross boundaries

- The essence of ‘collaboration’
- Only needed when conservation is at a broad scale, crosses boundaries and includes diverse stakeholders
- Like with resources that flow across boundaries (water, bark beetles, rinderpest, migrating wildlife, ….)
Keys to success:
4. Strong local capacity and organizations

- Devolution of use and management to the local level requires good and transparent local leadership and institutions (organizations)
- Institutions at the local level are often weak as are some of the governmental organizations that they work with
- Strong support for building capacity needed!

Barrett et al. (2001), Reid et al. (2009)
CAMPFIRE program, Zimbabwe

- Early example of community-controlled wildlife management in southern Africa
- In the most successful example of this program, after donor support ended, it became clear that local leadership was weak
- Here, full devolution of wildlife management to communities requires stronger leadership for continued and independent success
Keys to success:
5. Good incentives and benefits

- Incentives: profits from conservation and utilization like eco-tourism profits, hunting profits, others
- Other incentives may be just as important: empowerment, access to policy makers, cultural benefits, access to natural resources and land
- Improving these benefits is often crucial to success

Nelson and Agrawal (2008)
Government sharing of benefits can be rare

• The national governments of Kenya and Tanzania receive about $15 million each year from Serengeti and Mara park gate fees alone

• And yet pastoralists who live around parks take in about $500 per year per family from wildlife, about 11% of their income

• Thus the pastoralists bear the costs of living with wildlife while outsiders receive most of the benefits

Homewood et al 2009, Thirgood et al. 2008
Kenyan herders only have the incentive to conserve wildlife if it pays more than farming.

Wildlife only pays more than crops in the driest places.

If profits from wildlife were higher, much of Maasailand could live off eco-tourism.

Based on Norton Griffiths (2008)
Keys to success:

6. Devolution of use rights and profits

- Common vs private property
- Herders have clear rights to use, manage and benefit from the resource
- National politicians must give local communities some control over use and profits from conservation

Keys to success:
7. Equitable sharing of rights and profits

• This is extremely rare
• The powerful often hijack the process
• Disappointingly, community-based initiatives often make sharing benefits less equitable

Kellert et al. (2000), Thompson and Homewood (2002)
Economic returns to different groups from wildlife conservation, Mara, Kenya ($/hh/yr/100 acres)

<table>
<thead>
<tr>
<th></th>
<th>Group ranch member</th>
<th>Pastoral elite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small scale campsite</td>
<td>$275</td>
<td>$7,300</td>
</tr>
<tr>
<td>Large wildlife association</td>
<td>$125</td>
<td>$3,500</td>
</tr>
<tr>
<td>Select campsite association</td>
<td>$0</td>
<td>$3,500</td>
</tr>
<tr>
<td>Large-scale lodge</td>
<td>$0</td>
<td>$4,000</td>
</tr>
<tr>
<td>Tourism wages</td>
<td>$120</td>
<td>$1,150</td>
</tr>
</tbody>
</table>

Thompson and Homewood (2002), Thompson et al. (2009)
Not all can afford to join herder groups in Gobi, Mongolia

- In the Gobi of southern Mongolia, donor groups facilitated establishment of pastoral groups
- Groups help each other through economic activities (like felt making), fixing water points, and access to pastures
- In 2004, only 52% of the households joined groups, mostly the more educated
- Others said they did not join because they could not afford the fees to do so
Keys to success: 7. Transparency and accountability

- Many conservation efforts are not ‘downwardly accountable’ or transparent to local herding families.
- Even when downwardly accountable to an electorate, corruption can be pervasive.
- Some conclude that many African efforts at devolution enrich the local authorities but not local households.

Jones and Murphree (2001), Brockington (2008)
Keys to Successful CBNRM:
8. Clear rules about resource use and strong monitoring of success

- Rules are simple & easy to understand
- Rules are locally created
- Rules are easy to monitor & enforce
- Monitors and officials are accountable to communities
- Consistent and strong programs monitor success

Agrawal (2000)
New opportunities
1. Cross-scale governance

• Why bother? Because pastoral management and conservation is not confined to one scale

• There are horizontal linkages (like across an entire watershed or more widely in networks)

• There are vertical linkages (across levels of organization from local to national)

• Use the subsidiarity principle? ‘The goal should be as much local solution as possible and only as much government regulation as necessary’

• A role for boundary organizations and boundary individuals

Berkes (2004), p. 626
Regular seasonal movements take Mongolian herders across aimag (‘county’) boundaries.
Omngobi herders graze resting pastures while Sant herders are away for summer. But other herders come long distances to graze across a regional scale.
And other herders are moving across a national scale.

2007 Survey of herders in Selenge Aimag: >90% of randomly selected households were not “native” to the soum.
Cross-scale governance may require boundary spanning individuals and organizations, networks.
New opportunities

2. Adaptive co-management

- Co-management: the sharing of management power and responsibility, often between communities and government

- Often more complex: more diverse stakeholders, horizontal networks of local organizations, linking local to regional / national to international

- A better definition: ‘A long-term management structure that permits stakeholders to share management responsibility and to learn from their actions.’

A continuum of collaboration and joint decision-making

Total government control

Government informs public

Government consults with public “scoping”

Collaborative planning; partnerships

True collaborative conservation (also co-management)

Community ownership & management

Government decides & acts alone

Decide together, government acts alone

Decide together, act together

Community decides & acts alone

Fernandez-Gimenez/Reid
New opportunities
3. Hybrid local and scientific knowledge,

• Different people know different things about a landscape at different levels

• Multi-generational and passed orally from generation to generation

Berkes (2004)
Using triangulation to create hybrid and integrated knowledge

**Pastoralist contributions**

- Changes in land use and settlement over 50 years
- Long-term observations of wildlife locations in daytime and night-time
- Explanatory ideas of why wildlife are attracted to pastoral settlements
- Knowledge of quality and production of different grass species and parts of the landscape

**Scientist contributions**

- Changes in land use and settlement over 50 years
- Long-term aerial surveys of wildlife locations in 2 seasons/year
- Explanatory ideas of why wildlife are attracted to pastoral settlements
- Knowledge of quality and production of different grass species in other ecosystems in east Africa

Reid (2010)
Challenges:
But does community-based conservation deliver?

• Rarely measured with rigor, so little evidence exists

• Good prospects of social and ecological success:
  • Mongolia pastoral user groups
  • Some rancher coalitions in the US
  • And Australia
  • Kenyan pastoral conservancies?
Hypothesized effects of land use (ex-urban development) on biodiversity in the US West
Low human populations in pastoral communities = lots of wildlife, but some wildlife always avoid people like elephants, rhinos and lion

Current human population density, about 7 people/km$^2$

Green = possible synergism
Brown = competition

Red = Elephants, rhino, lions

Photos: D. Elsworth, C. Wilson
Reid, Rainy, Ogutu et al. (2003)
In some places, the challenges are large: insecurity and civil war.
Conflict creates both big challenges and hidden opportunities for conservation

• Akagera National Park, Rwanda, lost about 90% of its wildlife in the mid-1990’s because of unregulated hunting

• Karimonjong, northeast Uganda, lost nearly all its wildlife at the hands of Idi Amin’s retreating soldiers followed by armed herders

• But, the recent rediscovery of Africa’s second largest large mammal migration of Ugandan kob in southern Sudan

• Little prospect of the focus on the painstaking work to develop community-based approaches

(Kanyamibwa 1998)
Challenges: How do these efforts survive over time?

- CAMPFIRE program, Zimbabwe, early community-based wildlife management at a national scale.
- From 1989 through 2000, strong international support and some substantial success.
- By 2006, after removal of donor funding and Zimbabwe’s political crisis, the quality of governance and community benefits fell sharply.
- But project revenues and conservation benefits were sustained.
Challenges: It takes a long time

- It may take 10 years or longer to build local institutions
- This applies as well to cross-scale adaptive co-management institutions

Berkes (2004)
Conclusions: And what of the future?

• Few community-based initiatives succeed wildly, because the goals are so ambitious and the keys to success so difficult to achieve

• But, around the world, we are seeing diverse groups of people struggle together to attempt to sustain and regenerate pastoral livelihoods and conservation

• In the face of climate change and human population growth, I think those who struggle now will be the most resilient and successful in the future
References


