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Community-based Wildlife Management: Improved Livelihoods *and* Wildlife Conservation?[1]

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- **Under the right conditions, community-based wildlife management (CWM) can make a significant contribution to local livelihoods without detriment to wildlife populations. However, CWM is often burdened by unrealistic expectations and condemned as a failure before it has a chance to succeed.**
- **CWM is a complement to, but not a substitute for, protected area approaches to wildlife conservation.**
- **There are few cases where financial benefits unequivocally exceed financial costs but communities themselves appear in some cases to have decided that the other benefits (livelihood security, biomass, employment etc) are worth the costs (labour, time, resource use restrictions and so on).**

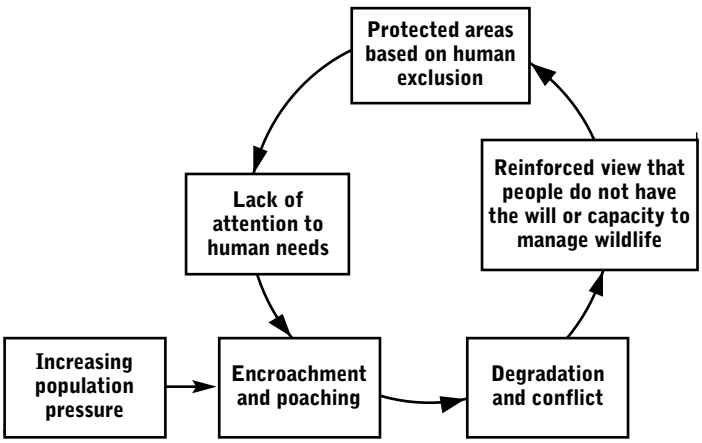
Protected areas – An historical anomaly?

Different cultures have different attitudes towards, and relationships with, wildlife. These differences are reflected in range of wildlife management practices employed around the world. In many parts of the world, community-based systems for wildlife management and conservation have existed for centuries. In late 19th century America however, conservation thinking suggested that people and wildlife were in conflict with each other and that wild areas should be set aside purely for aesthetic (non-consumptive) enjoyment. By the 1970s the United States model of national parks based on human exclusion, wildlife preservation legislation and the assumption of ownership of wildlife resources by the state had come to dominate conservation policies and actions worldwide.

What's right and what's wrong with protected areas?

The protected area approach to wildlife conservation and management has ensured the survival of populations of certain species and some habitats. It has also contributed to the generation of foreign exchange earnings in developing countries through international tourism. Some protected areas also help sustain natural resources on which neighbouring communities depend and from which (access permitting) they benefit: protecting water catchments for the benefit of downstream water users and preventing the destruction of forest resources by outsiders. However, in other cases protected areas have failed to sustain the wildlife populations they were designed to protect while at the same time having a negative impact on the food security, livelihoods and cultures of local people (see Figure 1). Moreover they are expensive to establish and maintain and rarely financially sustainable in the face of competing demands on dwindling government budgets.

Figure 1: The vicious circle of exclusionary approaches



CWM as an alternative to protected areas?

Over the last 20 years, over-extended state departments have been unable to provide sufficient resources for wildlife conservation. At the same time there has been a growing realisation both from the conservation movement (starting with the 1980 World Conservation Strategy[2]) and within development theory (the 1987 report of the World Commission on Environment and Development[3]) of the importance of understanding the needs and perspectives of local people. This

1 This briefing paper is based on the synthesis report of IIED's "Evaluating Eden" Project: Roe, D. Mayers, J, Grieg-Gran, M; Kothari, A; Fabricius, C and Hughes, R (2000) *Evaluating Eden: Exploring The Myths and Realities of Community-based Wildlife Management*. Evaluating Eden Series No 8. IIED, London.
2 IUCN (1980) *World Conservation Strategy: Living resource conservation for sustainable development*. IUCN, UNEP and WWF, Gland, Switzerland.
3 WCED (1987) *Our Common Future*. OUP, New York.

Box 1: What is CWM?

Community-based wildlife management *is the regulated use of wildlife populations and ecosystems by local 'stakeholders'*. Local stakeholders may be a village, or group of villages, an individual, or group of individuals with a shared interest in the resource. The key issue, is not how the community is defined, but the fact that stewardship (ownership or secure rights) over wildlife resides at the local rather than the state level.

CWM occurs within, around and outside protected areas. CWM initiatives can be consumptive or non consumptive, subsistence or commercial, traditional or modern.

influenced a shift in international conservation policy. Some programmes based on participatory approaches to wildlife management were initiated in Africa in the 1980s. These have provided both inspiration and models for a wide range of participatory wildlife management projects and initiatives around the world. More recently the Convention on Biological Diversity (CBD) emphasised three equally important objectives: conservation, sustainable use, and fair and equitable sharing of benefits - thus reinforcing the role of local people in wildlife conservation and management.

CWM is based on the assumption that it is possible to improve rural livelihoods, conserve the environment and promote economic growth all in one neat and tidy package. But we are still in the midst of much muddled thinking - researchers and practitioners are weak on the practicalities of how to apply vague notions of 'community', 'wildlife' and 'management' to specific reality. There is a danger that one dominant but simplistic and flawed approach - protected areas - will be supplanted with another. CWM is not a *substitute* for protected area approaches but a *complement*. As with any instrument, adaptation to local circumstances is key, as is action-learning to fine-tune the approach and to continuously improve. In some contexts, CWM is clearly not appropriate while in others it can provide a valuable contribution to both wildlife conservation and improved rural livelihoods (see below).

Recently it has been increasingly recognised that sustainable management requires political negotiations *between* stakeholders (including communities, governments, NGOs, international conservation agencies, the private sector) rather than one stakeholder taking control – whether it is the community, the state or the market. 'Collaborative' rather than 'community-based' wildlife management therefore better describes the current state of play.

Impacts of CWM on the poor

CWM has a significant and complex impact on poor communities – positive and negative, direct and indirect. In addition the impacts of CWM are often not equally shared amongst or within rural communities in a target area. Individual impacts are location-specific and dependent upon the type of wildlife management initiative established: tourism, wildlife trade, resource use regulation, hunting and so on. In general, positive impacts of CWM include:

- **Direct financial** benefits including the sale or lease of rights such as hunting quotas or tourism concessions; sale of wildlife products; revenue sharing schemes and so on; often in areas where there are limited other opportunities for generating cash income.
- **Indirect financial** benefits including employment, capacity building, improved productivity.
- Increased availability of **subsistence products** including bush meat and non-timber forest products.
- **Livelihood diversification** - spreading risk by providing a variety of livelihood options – and enhancing **security** by maintaining a stream of household income over the course of a year.
- Catalysing increased **developmental inputs** such as infrastructure, communications, training, extension work.
- **Institutional development and strengthening** through improved representation and participation of marginalized groups and management of benefit flows and collective income.
- **Empowerment** resulting in improved relationships with the state, participation in local and district level decision-making, control over resources and access to markets.
- **Cultural strengthening** through revival and recognition of traditional knowledge and practices and renewed spiritual affiliations with land and wildlife.

However, CWM is not without its costs to communities including:

- **Opportunity cost of land** – this is often not calculated but can be particularly high in areas where land dedicated to wildlife conservation might be suitable for agricultural production – and labour.
- **Crop and livestock damage** caused by wildlife and, in some circumstances, injury or loss of human life.
- **Restrictions on resource utilisation**, while often self imposed, may involve reduced access to subsistance products, particularly in the short term if attempts are being made to restore degrade habitat or declining wildlife populations.

If not properly managed, CWM can also be a source of **conflict** - within communities over benefits distribution and power; between communities who benefit from a CWM initiative and those who do not; and between communities and external stakeholders and pressure groups.

Do the benefits of CWM exceed the costs?

This key question is proving rather elusive as **computed costs are rarely complete**, most frequently excluding opportunity cost of land. It is also necessary to consider *who benefits* and *who bears the cost* as these may not always be the same. There are few cases where financial

Box 2: Significance of CWM income to the poor

The level and type of economic benefits generated by CWM varies enormously according to the type of initiative. Per capita or per household income may be small, but when viewed against potential income from other sources may be locally very significant and small benefits at crucial times can be of greatest value to the poorest sector of the community.

- **The 1989 household dividend in the CAMPFIRE district of Masoka was just $10, but represented an increase of 56% on household income from cotton – the other land use option in Masoka.**
- **Employment opportunities may be limited but deliver benefits directly to rural households. The wage bill for a typical South Africa game lodge is around 30% turnover compared to land lease fees of between 4 and 10% of turnover. In Sankuyo, Botswana, only 16% of the community are employed in a tourism venture but this represents 70% of the total formal employment of the community.**
- **In CWM initiatives that are successful at generating economic benefits, income can vary widely. For example, annual income from CWM initiatives can vary from less than $5 in Zimbabwe (average CAMPFIRE household dividend in 1996) to $35 in Pakistan (1997 revenue from ibex trophy hunting paid to 120 households) to $490 in Ecuador (paid to 10 community members involved in the Cofan ecotourism initiative) to $1,150 in Costa Rica (gross revenue from turtle eggs paid to each of the 200 members of Ostional community in 1996).**
- **CWM is significant in areas where there are limited alternative opportunities for employment or cash income.**

Box 3: Wildlife characteristics favouring CWM

- **Clear and defensible boundaries;**
- **Manageable scale;**
- **Relative scarcity;**
- **Commercial value;**
- **Relative proximity to communities;**
- **Predictability and ease of monitoring;**
- **Seasonality in tune with livelihoods;**
- **Ease of utilisation.**

benefits unequivocally exceed financial costs – and even when they do these may be limited. However, CWM should not just be judged on financial terms. In some cases communities appear to have decided that costs such as labour and time invested by people seem to be worth the resultant benefits such as biomass, livelihood security, employment, etc. This points to the need for participatory monitoring and for outside analysts to consider community perceptions of costs and benefits, as these may not necessarily match their own.

Impacts of CWM on wildlife

Well-resourced protected areas may have succeeded in conserving vulnerable species and ecosystems. However, involving local people in wildlife management does not mean that wildlife populations will no longer remain viable or that habitat will become degraded. In many CWM initiatives wildlife numbers have either increased, have stabilised following earlier declines, or have remained level. Where wildlife numbers have declined this has been attributed largely to lack of enforcement and/or lack of local rights and responsibilities over wildlife. The majority of CWM initiatives are focussed not on a single species but on ecosystem management and habitat protection resulting in significant benefits for wildlife populations. A number of CWM initiatives have therefore made a positive contribution to conservation by increasing the amount and/or diversity of wildlife habitat available. In areas where land is suitable for agriculture, however, investment in livestock and land clearance is likely to continue unless much more significant returns can be achieved from wildlife.

Factors influencing the success or failure of CWM

A number of factors influence the success or failure of CWM. These can be divided into those that determine whether or not CWM is likely to be established in the first place and those which determine whether or not an initiative will succeed in the longer term; some obviously influence both. The importance of context in determining the "shape" of CWM cannot be over-stressed. This includes the influence of past and current conservation policy and practice, integration of wildlife concerns into other sectoral policies, macroeconomic trends and globalisation, shocks and risks such as climate and conflict.

Even in contexts that would appear to be potentially supportive of CWM we should remember that CWM is often only one component of local livelihood strategies. There may be a multitude of criteria involved in people's decisions about livelihood strategies all of which have the potential to influence the outcome of a CWM initiative including:

- the nature of wildlife assets;
- the characteristics of the community and its institutions;
- knowledge and skills of individuals;
- availability of physical and financial assets.

Box 4: Community and instutional characteristics favouring CWM

Communities engaging in CWM need:

- **To be able to claim and secure tenure over land and wildlife;**
- **To be small-scale (social not spatial) to allow for effective organisation;**
- **To have a significant demand for, and dependence on, wildlife assets;**
- **To value the cultural significance of wildlife;**
- **To recognise that there are primary, secondary and tertiary stakeholders within the community.**

Community institutions for CWM need:

- **To build on existing motivation for managing wildlife;**
- **To be seen to be representative and legitimate;**
- **To be adaptable and resilient to changing circumstances and conditions;**
- **To be able to apply effective rules, mutual obligations and sanctions;**
- **To have a balance between customary and statutory law;**
- **To have negotiated goals;**
- **To have conflict-resolution capability;**
- **To demonstrate equity in distribution of benefits and social justice;**
- **The ability to negotiate;**
- **Political efficacy and space to build community-government relationships;**
- **A capacity for layered alliances;**
- **The confidence to coordinate external institutions.**

Additional factors that can often have a major influence over the long term success of CWM include:

- national policies, institutions and markets that determine resource tenure, land use, the spread of farming and settlement;
- processes of policy making and implementation;
- international forces and initiatives such as globalisation.

Does CWM work?

We contend that CWM can "work", since there is a range of examples of CWM contributing to both wildlife conservation and improved local livelihoods. But CWM can also fail miserably to deliver on either goal, and there are many contexts in which it would be pointless to try it. In many cases CWM has not been given the chance to work, because either the necessary conditions for its implementation have not been present or because it has been loaded with expectations beyond its scope. Just as the old ways of "fortress conservation" are failing because the instruments used are too blunt, lacking ideological refinement, CWM in many cases is still quintessential idealism, lacking the robustness and application required for use as a development tool. If we are to move beyond the rhetoric to provide practical and flexible solutions to the "people and wildlife problem" we need to review the assumptions about CWM, experiment - with as much space given to learning from failure as trumpeting success – to develop its role for given contexts, and integrate it with other instruments for community development and wildlife conservation. In the words of Marshall Murphree[4], "[CWM] has to date not been tried and found wanting; it has been found difficult and rarely tried!".

4 Murphree, M (2000) Community –Based Conservation: Old ways, new myths and enduring challenges. Paper presented at the conference on "African Wildlife Management in the New Millennium" Mweka, Tanzania, 13-15 December 2000

Box 5: Long-term sustainability of CWM: where do we go from here?	
What's needed	*Getting there*
Honesty about the real costs and benefits	**Develop clarity and trust based on examples of known benefits and costs – what to expect "now definitely, soon probably, later maybe".**
Focus on non-financial benefits as well as financial benefits	**Spread sound information on ecosystem/social service benefits and build social recognition of groups that have highlighted them.**
Benefits received commensurate with conservation achieved	**Treat CWM as a product of land/resource use (in competition with alternatives) and develop incentives on this basis – tried out with key actors.**
Direct community control over revenues and initiatives	**Establish improved credibility (hence confidence) of authorities that 'give some slack' to communities, and build capability of communities to take it up.**
Effective tenure enabled by secure and flexible law	**Improve clarity, certainty and exclusivity of rights and their enforceability; develop legal flexibility in definition of management groups and areas of jurisdiction.**
Devolution to lowest unit of effective proprietorship	**Work on all the enabling measures: legal mechanisms for transfer of appropriate authority, supporting regulations, extension, skills development, and trust-building between communities and authorities.**
Engagement with extra-sectoral influences through strategic frameworks	**Collaborate with NSSDs and other strategic processes, and with EIA/SEA of projects and policies to enable CWM priorities to influence decisions/budget allocations in other sectors, and develop incentives and systems of due diligence in other sectors to support CWM.**
Capability to absorb market fluctuations	**Conduct supply chain analysis, build alliances, establish buyers' groups, and build market safeguards into regulatory and institutional frameworks.**
A forum and participation process to set national priorities	**Promote recognition of different conceptions of what the problems and priorities are. Promote knowledge amongst stakeholders of each others' perspectives, powers and tactics; and develop consensus and non-consensus-based approaches which can accept dissenting views and establish reasonably representative priorities.**
Strategic information and knowledge systems	**Promote democracy in use of 'good enough' information as the engine for better policy and practice, and develop usable information on key social and economic issues of use and demand as well as on wildlife assets.**
Support for innovators and development of policy communities	**Free-up motivated people in institutions to develop: experiments with policy, collaborative learning processes with monitoring by stakeholders, policy analysis with marginalised groups, and an open process to consider adaptation.**
Policy instruments which improve the policy process	**In developing the best policy tools mix for the context, pay particular attention to the legal, financial and information mechanisms for increasing local negotiating capacity, and research and extension brokering tools.**
Analysis of the real costs of donor support and development of exit strategies	**Develop better donor understanding of appropriate contexts for long-term donor subsidy versus short term catalytic support, and more effective exit strategies for the former.**
Financing for joint ventures, land trusts and conservancies	**Avoid 'project' approach through capital investment in trusts and partnerships; build brokering capacity to involve communal landholders; and facilitate negotiation and claims-making capacity of disadvantaged groups.**
Projects linking policy processes with on-the-ground practice	**Limit project financing to projects which build institutional and policy support, build capacity in institutions for local level conflict resolution and trial policy tools for stakeholders to explore each others' claims, make mistakes, learn, and make changes.**
Support for formal policy reform	**Increase stakeholder engagement, and build on existing motivation to develop new approaches eg. balancing customary and statutory law.**
Good communication between levels – local to international	**Focus inter-governmental and civil agreements and initiatives on dimensions of equity, and iron out contradictions between levels in agreements.**
Multilateral environmental agreements and regional agreements	**Negotiate for: CITES and CBD to become more in tune with CWM; environmental and social needs of CWM to be recognised in key trade agreements like WTO; and regional fora as loci for CWM cooperation.**

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