

**COMMUNITY-BASED CONSERVATION:
Old Ways, New Myths And Enduring Challenges**

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"Community-Based Conservation – The New Myth?"

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By M.W. Murphree

1. Introduction

The organizers have asked me to make a “key” presentation introducing the Conference’s third theme, “Community-Based Conservation – The New Myth?” The purpose of such an introduction is to set a general framework for discussion; it cannot claim to exhaustively address all the issues involved. Thus, this paper starts with only a brief sketch of the rationale for Community-Based Conservation (CBC), its successes, problems and the critiques leveled against it. Hopefully, other papers and case studies presented in the section will expand on these. The principal focus of this paper is on the myths which have confounded our understanding of the essence of CBC and inhibited its implementation, and on the underlying issues that CBC must face if it is to contribute answers to the conservation challenges which Africa must face as it moves into a new millennium.

2. Old Ways and New Approaches

As our Conference Announcement states, “CBC is no longer a new idea.” Indeed we tend to forget how old it is. The notion of incorporating the human resources of communities into the conservation of nature in Africa is not new. Leaving aside for the moment the fact that the cultures of local peoples in Africa have always striven for sustainability in use, one has only to examine our colonial histories to find instances, such as the records of Maasai-Mara, Amboseli and the Ngorongoro Conservation Area, to realize that these notions have in principle, if not in practice, a long pedigree. It was, however, only in the 1980’s that a combination of a new “bottom-up” philosophy of rural development and a growing constituency of concerns for African nature conservation provided the basis for major aid allocations by donors to community participation approaches and gave them the status of quasi-orthodoxy in the strategies of major international conservation agencies.

Taken in broad historical context, all of this is to the good. It marks a positive evolution in conservation policy from the days of early colonialism with its strategy of taking large tracts of land away from rural peoples for the establishment of protected areas and removing their jurisdiction over the natural resources of the land that remained with them. This was, in effect, **conservation against the people**. There followed a stage during which growing concerns for the state of the African environment prompted governments to introduce sweeping legislation governing the use of land and natural resources and the creation of conservation agencies to provide extension services and to enforce good practice. This was **conservation for the people**.

The situation did not, however, improve, since the State's reach exceeded its grasp. Governments simply did not have the capacity to enforce what they in their wisdom had decided was good practice for Africa's real natural resource managers, the millions of small-scale farmers and pastoralists who populate rural sub-Saharan Africa. A new strategy seeking to co-opt the managerial capacities of this uncaptured peasantry has thus arisen – “community participation”. This, in effect, is ***conservation with the people***.

This, I suggest, is the stage where we are generally today. It reflects a new recognition of the environmental insights of Africa's cultures and the determinative power of Africa's rural peoples to shape the Continent's environmental future. In certain contexts this strategy has recorded successes, as I hope we shall hear at this Symposium. But is it enough? The successes we record are isolated and contingent; externally initiated and heavily subsidized by the outside world. The broad CBC picture in Africa remains one where successes stand as islands in a sea of initiatives where performance rarely matches promise and is sometimes abysmal.

This lack of generalized advance in stemming negative trends in African environmental status, let alone reversing them, has unleashed a tide of disillusionment in CBC. In the literature, this disillusionment takes different forms and stems from various perspectives. One strain in this literature is essentially an emotive polemic against sustainable use, reflecting cultural sensitivities in industrialized and urbanized societies (cf. Hoyt, 1994; Patel, 1998). Another, more professionally crafted strain, is found in the writing of conservation biologists who reject current trends towards a more systemic and contingent science of conservation biology¹ and argue for a return to more directive state policies informed by a disciplinary and reductionist science separated from people and politics. Oates, for instance, sees the linking of economic development and nature conservation as being deeply corrupting, both for the conservation ethos and the management of natural resources. He argues therefore, that conservationists should “return to their roots and dedicate themselves to safeguarding protecting areas.” (Oates, 2000) In a similar vein, Barrett and Arcase suggest that “Integrated Conservation and Development Projects” (ICDPs) raise local expectations to unattainable levels, “stimulate greater per capita demand for meat and other wildlife products,” “expose rural residents to new risks associated with exchange entitlements,” and “contribute to higher rates of local population growth” in areas where they are successful. They conclude that it is “biologically unsound to base human needs, which must be assumed to grow, on the harvest of wildlife populations that will not grow,” and suggest that development projects should “decouple human needs from the harvest of large mammals.” (Barrett and Arcase, 1995)²

A third strand of critique is perhaps the most important for this conference. This emanates from those who accept systemic approaches to conservation, the centrality of rural populations for the future of the bulk of Africa's biodiversity and the linkage between conservation and development; but who also consider CBC to be flawed in concept and implementation. Several contemporary over-views detail specific critiques made; these include Agrawal (1997), Fabricius, Koch and Magome (1999), Barrow, Gichohi and Infield (1999), and Hulme and Murphree (2000). Among the criticisms made are that CBC initiatives and projects:

- make unwarranted assumptions about the existence and profiles of *communities*;
- encourage stratification and inequality within *communities*;
- are externally initiated and imposed;
- can be co-optive mechanisms for the indirect re-establishment of state or elite control;
- lack mechanisms for accountability, internally and externally;
- involve high transaction costs, especially in terms of time;
- require high facilitation input costs;
- require long start-up time frames;
- show little evidence that they encourage sustainable use, or are sustainable themselves; and
- lack the technical and financial capacities for natural resource management.

This list is by no means exhaustive and doubtless discussions at the Conference will add to the ten points made above. All should be taken seriously and incorporated into further design and implementation activities.

We need, however, to go beyond “design tinkering” and implementational adjustment if CBC is to achieve a fresh dynamic in the new millennium. Of the critiques above, the third and fourth – imposition and co-option are fundamental. The stage of “participation,” of *conservation with the people*, is clearly a stage too short. We need to move on to a fourth stage, ***conservation by the people***.³ The section that follows seeks to show what I mean (and do not mean) by this catch phrase.

3. New Myths

I use the word “myth” here to denote ideas and images which lack a genuine conceptual pedigree but which insinuate themselves into our thinking through careless assumptions, persistent clichés, the deceptions of language and, perhaps, the imperatives of sectional interest. The world of CBC is a fertile breeding ground for such myths, which distort the clarity of our thinking and inhibit our ability to act incrementally. I mention five such myths below.

3.1 CBC is *the answer*

I have never heard anyone claim that CBC is a panacea for all of Africa’s environmental problems, but its exponents sometimes give the impression that they think it is. Certainly, its detractors often treat it as an opposing, mutually exclusive conservation paradigm to protected area conservation, *vide* the quote from Oates above. CBC was never designed as a substitute for protected area approaches; it was designed to be part of a suite of

conservation approaches within national conservation strategies, for particular contexts and circumstances.

Any responsible national conservation policy must address the issue of preserving the nation's biological diversity. Where vulnerable species and key habitats or landscapes are concerned these are classified as national common property and systems of protected areas are established to accommodate them under the direct responsibility and management of the state.⁴ This is a tried and tested formula, which works under one proviso. This proviso is that the state has the will and the resources to manage the protected areas or national park system effectively. Under prevailing economic conditions in most African countries this implies that the parks estate must necessarily be relatively small and state managerial resources concentrated. The conservation and sustainable use of biodiversity outside this limited area is the arena to which CBC is addressed; indeed any national conservation strategy that fails to address this arena is grossly negligent.

Even within this arena, however, CBC is not always appropriate. It is not designed for private individual landowners (except when they choose to collaborate communally), nor can it operate where spatial conditions of human settlement preclude communal interaction. Content and purpose are therefore critical variables in determining whether CBC is appropriate. CBC cannot be loaded with inappropriate, polyvalent expectations; our concern should be that it has not been developed in the myriad contexts where it is appropriate.

3.2 CBC is about “communities”

To assert that this is a myth is likely to shock, which is my intention. One of the major liabilities of CBC is its name, which incorporates one of the most vague and elusive concepts in social science and which continues to defy precise definition. (Sjoberg, 1984) Critics of CBC complain that the approach rests on the assumption that “communities” – small-scale human groupings socially bound by a common cultural identity, living within defined spatial boundaries, interacting on a personal rather than bureaucratic basis and having an economic interest in the common pool interests of the area – exist. They point out that such conditions rarely exist: local settlements are culturally heterogeneous and economically stratified, boundaries are porous and social cohesiveness is fragile.

To rest the case for CBC on some *a priori* definition of “community” is thus futile and misleading. It is far more helpful – and less mythical – to look at the functional and organizational essence of what we are talking about. Functionally, CBC is directed towards the collective management, use and controls on use of what are held as common pool resources, and benefit derivation and distribution from such use. Organizationally CBC is directed at locality levels below those of the larger-scale bureaucratic units which governments have created at national or district levels, is conducted through primary relationships, is governed by normative consensus, is legitimated by a sense of collective interest and operates over a defined jurisdiction.⁵

Put succinctly, CBC is about local collaborative regimes of natural resource management with defined membership and jurisdiction. One can call these regimes local and “communal” because of their social size and mode of interaction,⁶ and one is on much firmer ground in using the adjective rather than the noun. But to rest CBC on some fixed construct of “community” is to risk the danger of mythologizing its essence.

3.3 CBC equals decentralization

One of the most persistent errors in the literature, even in the work of experienced professionals, is the conflation of decentralization with devolution. The two are significantly different. Decentralization is the delegation of responsibility and limited authority to subordinate or dispersed units of hierarchical jurisdiction, which have a primary accountability upward to their superiors in the hierarchy. Devolution involves the creation of relatively autonomous realms of authority, responsibility and entitlement, with a primary accountability to their own constituencies.

Devolution is an approach that faces strong and entrenched opposition. The state, its private sector allies and its bureaucracies have their own appropriative interests in local resources and the state is loath to legitimate local jurisdictions in ways that diminish their ability to claim the benefits of these resources. States, even when they grasp the importance of local management and stewardship, thus prefer decentralization to devolution. This tendency, more than any other factor, is responsible for the failure of programmes ostensibly designed to create local natural resource management jurisdictions. Responsibility is divorced from authority and entitlement, and such programmes remain co-optive rather than empowering. Typically, such programmes remain, as Murombedzi comments regarding Zimbabwe’s CAMPFIRE programme, “informed by a centralizing and modernizing ethic, even when decentralization shifts the nexus of this perspective to lower tiers of state governance.” Thus, “in such cases the top-down preferences of central government on communities have merely been replaced by the top-down preferences of local governments.” (Murombedzi, 2000)

Decentralist approaches to localized natural resource management are thus, to return to my remarks at the end of Section 2, representative of community participation or conservation with the people. People participate in projects, but the state retains a large measure of direction and control.

This may be appropriate in certain contexts, i.e. in community outreach projects sponsored by park authorities. It is in fact a form of “community conservation.” Decentralization falls short, however, of the combination of authority, responsibility and entitlement required for *Community-Based Conservation*, or *conservation by the people*.

For this to happen a robust devolutionist approach is required, in which the locus of initiative and decision-making is shifted from the state to relatively autonomous localized jurisdictions. I stress the phrase “relatively autonomous” as no entity or enterprise, however privatized, is completely autonomous, and

CBC is not intended to foster autarky. CBC does not seek a complete withdrawal of the state from local affairs. It does, however, call for the role of the state to change from being one which is directive and inhibitive to being one that is facilitative through the provision of coordination, extension, infrastructure and arbitration; and enforcive as a last resort if necessary.

3.4 CBC provides “win-win” solutions

One of the greatest attractions of CBC specifically, and conservation and development approaches more generally, is the suggestion that these have the potential to meet multiple objectives and satisfy the aspirations of different constituencies. Bromley refers to this as “incentive compatibility,” which, he says,

“... is established when local inhabitants acquire an economic interest in the long-run viability of an ecosystem that is important to people situated elsewhere... Such ecosystems represent benefit streams for both parties; those... who seek to preserve biodiversity and those who must make a living amid this genetic resource.” (Bromley, 1994: 429-430)

There is a great deal that can be said in support of strategies of incentive compatibility. Environmental conflicts do not necessarily involve a zero-sum game and rightly structured the interests of the larger collective whole and those who use and manage its constituent elements can often be brought together for coactive, mutual benefit. This is the implicit assumption that lies behind much of the advocacy for CBC.

If, however, we assert that CBC inevitably leads to “win-win” outcomes we will be propounding a myth since this is rarely likely to be the case. Providing effective incentive packages for CBC usually will require significant transfers of power, of rights and resources. There will be losers as well as winners. This is an unpalatable fact, but unless we face it, our prescriptions will continue to deal with symptoms rather than causes.

The reason lies fundamentally in the value of natural resources and the importance of power to control and benefit from them. The history of colonial Africa is a history of the appropriation of this power and benefit by the state from those who live with and use natural resources. This was done largely by claiming the *de facto* and often *de jure* ownership of natural resources for the state and conferring only weak, usufructuary rights to the land on which these communities live. This condition has persisted into the modern post-colonial state almost without exception. As in colonial times, “communal lands” continue to be in various degrees the fiefdoms of state bureaucracies, political elite and their private sector entrepreneurial partners.

My example has been from Africa, but its characteristics can be found in a multitude of examples from around the world – not only the “developing” world but the “developed” world as well. Devolution in tenure, in responsibility, in rights and access to benefit streams is a fundamental allocative and political

issue. Power structures at the political and economic center are not disposed to surrender their privileges and will use their power, including their abilities to shape policy and law, to maintain the monopolies of their position.

All this is not new in essence. An 18th century rhyme put the issue succinctly for that period of English history:

The law doth punish man or woman,
That steals the goose from off the common,
But lets the greater felon loose,
That steals the common from the goose.⁷

I am not suggesting here that we dispense with law, with socially legitimated proscriptions against deviance, which form an important negative incentive in our search for sustainability. What I am suggesting is that the processes which lead to policy and law, be further democratized and made more responsive to the incentives for sustainability, which lie with those who are the primary users, producers and managers of our natural resources. To put my point differently, good civil governance is an indispensable component in the search for CBC.

3.5 CBC provides the escape from rural poverty

This is a dangerous assertion, a variant of the myth that natural resources can in themselves satisfy the needs of rural populations in Africa. The myth ignores reality, encourages false expectations and leads to misplaced criticisms of CBC.

I illustrate the point with an example drawn from a consultancy in which I was involved in 1999. The consultancy, commissioned by the Government of Malawi and the Lake Malawi/Nyasa Biodiversity Conservation Project, called for a strategic plan for the Nankumba Peninsula with the objective being “To improve the standards of living of the people living in the Nankumba Peninsula *through* the sustainable use of the natural resources of the area.” In our investigations it became clear that the Peninsula was endowed with a range of natural resources, which under the right circumstances could augment the Peninsula’s tourism industry and benefit a segment of the Peninsula’s population. At the same time, we had to recognize that the Peninsula is home to 110,000 people with a population density of 85 persons per km². Most of these are small-scale farmers or fishermen. There could be no realistic expectation that natural resources on their own could significantly improve the livelihoods of this population on their own or across-the-board; this would have to be through improved agricultural production and increased wage labour opportunities. We thus suggested that the Plan’s objective itself be changed to read: “To improve the standards of the people living in the Nankumba Peninsula *while ensuring* the sustainable use of natural resources.”

The Nankumba conditions described above hold generally for most of rural Africa. There *are* situations where local peoples could live solely on their natural resources, and live well under the right kind of CBC regime. But these are few and far between. I can think of only two such contexts in Zimbabwe.

Generally, however, we must accept that natural resource production is linked to agriculture in household production schemes. Natural resources form part of the “off farm” assets of such schemes and it is criminal to neglect or abuse them. But to expect them to provide more than they can is to encourage a myth.

4. Enduring Challenges

As it moves into the 21st Century, Africa faces a daunting array of environmental challenges. From this array I want in this last section to underline four for special attention. These are challenges that apply to natural resource policy and management generally, but are of particular significance for CBC approaches. They have not burst suddenly on the African scene with the dawn of the new millennium; they are instead persistent issues in environmental governance, which have taken on particular forms and acquired growing salience in our recent environmental history. They pose questions for which there are no easy answers, but these must be faced if we are to be creative in our response to the charges we now face. Adams has remarked that conservation is “not about preserving the past in any simple sense... Conservation is about handling change, and about the transition from the past to the future.” He adds further that “conservation is not about trying to stop the ‘human impact on nature,’ but about negotiating that impact.” (Adams, 1996: 96-97) The following challenges are important items for the agenda of this negotiation.⁸

4.1 Dealing with demand

Resource/demand ratios have always formed an important part of the conservation equation. Where natural resource supply is high and human demand low, the need for control is also low. When the supply of natural resources is low and human demand is high, the need for control is also high. This simple but fundamental equation leads to a number of hypotheses regarding each of the three variables mentioned. Here I confine myself to the demand factor as it affects CBC, other than to note in passing that one of the goals of CBC should be to maintain or increase supply.

Demand can change for a number of reasons, including technological change, alternative supply and cultural or life-style preferences. For most African CBC contexts, however, demography is the most important driver of demand, through natural population increase, immigration or the absence of non-rural livelihood alternatives. This poses a serious threat to CBC initiatives. In an economic analysis of Zimbabwe’s CAMFIRE programme Bond, for instance, suggests that declining performance in the Zimbabwean economy with its attendant high unemployment has led to an urban-rural drift and forced “both rural and urban households to exploit natural resource capital as their only possible alternative.” (Bond, 2000) In such a scenario current defects in the CAMPFIRE programme may well be as attributable to national macro-economic under-performance as to its institutional shortcomings. A general lesson can be drawn: national macro-economic health and CBC success are closely linked.

Another lesson can be drawn. CBC jurisdictions require strong norms or rules of inclusion/exclusion, particularly as demand increases. These need not be pre-ordained or fixed; indeed they will only be effective if they are dynamic and responsive to locally evolved norms of reciprocity.⁹ A shifting accommodation between the imperatives of organizational exclusion and normative inclusion in resource use driven by local institutional evolution is an enduring challenge in dealing with demand.

4.2 Consumption and commodity production

The use of natural resources in rural African contexts has been frequently analyzed in terms of a typological dichotomy which distinguishes between direct consumption for local subsistence needs and commercial use with a focus on exchange values, with the added overlay that the second mode is a recent development. Historically, this is problematic, since trade in ivory, “bush meat” and medicinal plants have a long history in the continent. It is, however, unquestionable that the commercial use of wild natural resources has been on the increase in recent years with the penetration of the market economy into the remote hinterlands of national urban centers and international markets (particularly for woodland products and tourism) extend the reach and volume of their product demand under “globalization.”

This trend has been particularly evident in wildlife-based CBC initiatives in Southern Africa, which lay emphasis on economic incentive. Their approaches have been informed by the experience of wildlife ranching on private land, where wildlife production for venison and hides has been shown (depending on specific content) to yield financial returns generally no greater than livestock production, even though it is more eco-friendly. However, with the advent of wildlife tourism in either viewing or safari hunting forms during the 1970’s, this picture changed. This mode of use contains a significant “value added” component and net returns have made wildlife production a preferred land use option on extensive areas of ranch land. (Child, 1995) This experience has been transposed into communal land contexts through CBC approaches and there is no question that financial success for CBC in Namibia, Botswana, Zimbabwe and Zambia rests strongly on the marketing of wildlife through tourism.

Some analysts have, however, questioned the desirability of resting CBC on commercial use. Among the dangers that they foresee are that:

- commercialization may motivate overharvesting and unsustainability;
- the dominant wildlife use mode, tourism, is an unstable and unreliable market;
- it encourages corruption and nepotism at communal and higher levels;
- local-level organizations are ill-equipped to deal with the complexities of the market, forcing them into continued

dependencies on established professional monopolies, often racially-linked; and

- the long market chains involved introduce a number of “middle men,” resulting in a situation where the producer receives only a small and inequitable portion of total net revenue.

The evidence from CBC in Southern Africa modulates but does not eliminate the force of these criticisms. Where perceptions of enduring entitlement are strong, local regimes are often more conservative in the setting of quotas than national authorities. (Jones, 2000; Murphree, 1997) Tourism is certainly an unstable market, as recent experiences in Eastern and Southern Africa have shown, but safari-hunting tourism seems to be a remarkably robust exception.¹⁰ Local-level negotiating skills have shown a sharp learning curve to levels of considerable sophistication.¹¹ Indeed a “spin-off” benefit of commercialization is that it provides the training ground for this kind of commercial negotiation, frequently the only opportunity of this type that local groups have. At the same time, there can be no denial that commercialization creates dependencies on extra-communal skills, that the absence of professional training still characterizes most CBC initiatives and that it expands opportunities for corruption, rent-seeking and financial chains which siphon off most revenue flows before they reach local producers.

The debate on the benefits and dangers of commercialization will predictably continue. We must, however, accept that the trend to further commoditisation of natural resources is likely to continue. It is part of a generically larger trend brought about by globalization and the growing power of the private sector. Direct linkages between the market place, the private sector and communal enterprise are an enduring challenge, in which the dangers of these linkages are controlled and the opportunities they present are exploited.

4.3 Articulating the local with the national

This paper (section 3.3) has already suggested that CBC calls for relatively autonomous local jurisdictions, with the caveat that this does not imply autarchy, a fragmented array of disjointed local enterprises. Communal regimes cannot operate in isolation. They need to cooperate with other regimes of similar size, particularly those that are their neighbors. Depending on species and ecosystem characteristics, they may need to be integrated into larger systems responsive to scaler ecological management requirements. Hierarchically, they need legitimacy and facilitation from the state. The enduring challenge here is how to find a formula that maintains the dynamic of local jurisdiction while being responsive to the imperatives of ecological and functional scale.

There are no easy answers but I suggest that the formula needs to contain two elements. The first is, when scaler considerations require it, to expand the reach of local jurisdictions by aggregation rather than through expropriation. There is a big difference between the two. Expropriation occurs when the state appropriates authority for given functions in the cause of larger collective

good. Aggregation occurs when local jurisdictions remain in place but delegate aspects of their responsibility to collective governance of greater scope in which they continue to play a role.

Closely aligned to this approach of delegated aggregation is the issue of the direction of accountability. In appropriative conjunction, accountability is primarily from the local upward to the state. In delegated aggregation, accountability is primarily from the unit of collective governance to its constituent local enterprises. This has a number of specific implications, including the way in which CBC revenues are handled. Typically, at present, such revenues are collected by the state (or one of its sub-units) and then passed on, less levies, to the local units that have produced it. This creates conflict and contributes to de-motivation. It is far better in my view for local enterprises to be in direct receipt of the revenues they generate and then be taxed on these revenues for the costs of aggregation and the services they receive. This promotes fiscal clarity and promotes the accountability flows advocated above. Taken together, delegated aggregation and constituent accountability provide pointers for systems that bind local CBC enterprises into larger structures of natural resource governance.¹²

4.4 The confluence of professional and civil science

My last enduring challenge is one addressed in particular to ourselves, by which I mean we who purport to be experts in conservation policy and the guardians and managers of Africa's biodiversity. Slowly, and sometimes reluctantly, we have come to accept that people count, and thus have reached the stage of *conservation with the people*. We have, at this stage, even come to the acceptance that rural peoples have an accumulated ecological wisdom, which can contribute to planning and management and thus give space to "indigenous technical knowledge" (ITK) as a factor to be considered. But we reserve to ourselves the status of being the final arbiters of what CBC should be, based on our science and professional experience. This creates a mind-set in which success in CBC is seen as a linear progression towards a predetermined set of fixed goals.

In reality, we know that 'progress' in CBC projects and programmes is not linear. What, in the light of our 'objectively verifiable' criteria, is judged as static or recalcitrant may shift to what we consider 'success,' while 'success cases' may seem to falter and fail. We then tinker with details and proceed in the hope of progress, only to be frustrated again.

To transcend this syndrome we need to radically revise our mind-set, to see process as an end as well as a means, and to accept that the core objective of CBC is increased communal capacity for adaptive and dynamic governance in the arena of natural resource use. It is, to revert to Adams, about local capacities to handle change and to negotiate the human impact on nature from past to future. Thus CBC is as much about *resourcefulness* as it is about *resources*.¹³

For this to happen we need to forge a new alliance between our professional science and the civil science of the local peoples involved in CBC. This involves far more than giving a place to “indigenous technological knowledge.” This is useful, but ITK has its limitations, since ITK is essentially retrospective and has limitations in its application to current circumstances. What local regimes need to develop in their civil science is what any good science requires: the freedom to experiment, to make hypotheses and test them in experience. Professional science can help them do this, but a pre-condition is that local jurisdictions have the necessary entitlements to do so: the right to plan, the right to implement in their own manner, the right to make mistakes and the right to correct them. This is the robust devolution in CBC discussed in section 3.3. With such a civil science, CBC provides new and exciting ways for the confluence of civil and professional science.

5. Conclusion

In conclusion, I now summarize the most important points that have been made in this paper. CBC is not *the* answer; it is one of a number of conservation strategies and relevant only for certain, highly important contexts. It should not be loaded with expectations, or “new myths,” about results that are beyond its scope. It is complex and requires processes of evolution over long time frames. It stalls and becomes static when not accompanied by the necessary devolutionary entitlements it requires. With these, it holds out the promise for a new dynamic in African responses to enduring environmental challenges as we move into a new millennium.

Has it worked? Unfortunately, so far in too few, isolated instances. Our final judgment must be that CBC has to date not been tried and found wanting; it has been found difficult and rarely tried!

ENDNOTES

- ¹ For insights into the epistemological shifts involved in this trend in conservation biology, see, for instance, Hillborn & Ludwig (1993), Holling (1993), Holling and Meffe (1996), Constanza (1993) and Lee (1993).
- ² Any serious scholarship on CBD must examine these and other similar arguments produced by this strain of analysis. A rebuttal to Oates is provided by Fairhead and Leach (2000); a rejoinder to Barrett and Arcase is provided by Murphree (1996).
- ³ The four-fold categorization of stages in African conservation is taken from Murphree (1998).
- ⁴ With specially protected status for vulnerable species outside state protected areas.
- ⁵ Jurisdictional boundary setting has a number of dimensions. It involves a specification of the resource or resources concerned. It frequently, although not always, has a spatial dimension. And it requires a definition of entitlement, in terms of what it is and who holds it. For further discussion see Murphree (2000) and Barrett and Murphree (2000).
- ⁶ The primary relationships which characterize CBC are to be understood in terms of Tonnies' distinction between *Gemeinschaft* and *Gesellschaft* (Tonnies, 1963). The use of the term "local" as a synonym for "socially small scale" is more problematic since the latter refers to social topography rather than spatial extent. However, the continuous social interaction involved in *Gemeinschaft* does have spatial implications and references to "local" and "locality" are legitimate for lay discussion if this is understood.
- ⁷ "On enclosures," 18th century, anonymous. My thanks to Rowan Martin for drawing this quote to my attention. For further discussion on this theme, see Murphree (1995) and Murphree (1999).
- ⁸ It is emphasized that each of these challenges is a subject-in-itself, worthy of book-length treatment. This address provides only a sketch of some of the more salient issues involved.
- ⁹ For a detailed case study analysis see Sithole, 2000.
- ¹⁰ During 2000 over-all tourism revenues in Zimbabwe fell by approximately 60%, but safari hunting revenues in the CAMPFIRE Programme continued to be stable, with most operators reporting full bookings.
- ¹¹ For a positive case study example, see Murphree 2000 (b).
- ¹² For an elaboration on these issues, see Murphree (2000a)
- ¹³ Adapted from Kaplan (1999)

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