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**Experiences With Community Based Wildlife Conservation In
Tanzania**

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INTRODUCTION: CONSERVATION BY THE PEOPLE

By
Dr. Rolf D. Baldus

I

From 1878 to 1880 Joseph Thomson on his Royal Geographical Society expedition traversed what is now the Selous Game Reserve in Tanzania. He reached Lake Nyasa and Lake Tanganyika before returning triumphantly to the coast.

Where did he see his first elephant? At Edinburgh Zoo! This was the result of the ivory trade – a very unsustainable kind of wildlife use, we would say today.

The German colonial Government introduced modern wildlife legislation starting in 1896. The first Game Reserves were created in 1896 making them the first protected areas in Africa. There were 15 Reserves, covering 5% of Tanganyika, before the first World War.

Commercial elephant hunting was stopped in 1911. Soon villages within the area which Thomson passed without seeing a single elephant had to be moved because of permanent crop raiding by pachyderms.

At independence there were three National Parks, six Game Reserves and the Ngorongoro Conservation Area in Tanzania. Nowadays, the number has multiplied by a factor of four and five respectively. Over 20 percent of the total land surface of Tanzania is now under protection. With the exception of Ngorongoro people are prohibited from settling there.

Conservation problems remain, but studies show that most of these areas enjoy high biological biodiversity and wildlife numbers - in many cases more than a hundred years ago. Parks work!

Recent studies have also proven this fact for other parks in Africa. They work - not everywhere, but in many places.

However, protected areas work at high costs.

- High costs to defend them. They are difficult to finance, as many of these countries belong to the poorest of the world with the majority of their people surviving in poverty.

- High opportunity costs: Many parks are agriculturally marginal, but others are on highly productive land.

- And finally high social costs, because nearly everywhere people used to live and were driven out of these areas at some stage, usually without compensation.

This was “**conservation against the people**”.

Social conflicts between people and wildlife, people and parks are the other side of conservation, not only in Tanzania. Conservation does not come free but this is easy to say for those do not have to pay the bill.

Tanzania is privileged in that it still has wildlife in high numbers outside the protected areas on village land, for example 20,000 elephants just in the vicinity of the Selous Game Reserve. In Ngarambe village for instance elephants are inside the settlement, nearly every night, not only when the maize is high. Near Lindi airstrip lions killed 23 people in five months in 2000. In Bonye-Dutumi, crocodiles killed 11 people in the last two years. We estimate that wild animals kill at least 200 people on average per year in Tanzania.

The magnificent wildlife which the visitors from European cities admire, is a burden to the small farmer. “Wadudu” he calls it, the same term as is used for biting bugs and bloodsucking mosquitoes.

The only privilege he or she enjoys is the consumption of “bush meat”, completely illegal in Tanzania, but in many places the only meat available. Colonial and post colonial legislation

has alienated villagers from this once freely available resource. Take-off levels were sustainable in the old days, but less due to existing traditional rules than to low numbers of people and the existing inefficient hunting techniques. This all changed with the coming of steel wires, muzzle loaders and modern firearms.

A recent two year study done in seven Eastern and Southern African countries gives empirical evidence that the hunting and consumption of illegal game meat in these two regions is comparable to the flourishing, well researched bush meat trade in Western and Central Africa, in particular in the rainforest. It is only a romantic myth that bush meat originates from small-scale consumptive poaching which is less destructive than commercial trophy poaching. Meat poaching is widespread, uncontrolled and mostly at unsustainable levels. This study shows that even a country which has made all hunting, except for birds, illegal, as it is claimed that legal trade encourages the illegal one, is in no way better off. Much concern centres on flagship species like elephant and rhino, but in most countries it is actually the massive use of wildlife for bush meat which – besides population growth and loss of natural habitat – is the real threat to wildlife.

Government conservation agencies, in most cases little represented outside the protected areas, have not been able to control this type of poaching. In fact, it is sometimes the official game scout in the village who runs the trade.

II

In the year 1987 the Tanzanian Government requested Germany to assist in saving biodiversity in the Selous ecosystem in the Southern part of the country. The most obvious downward trend at that time was the disappearance of the rhino and the crash of the elephant population from an estimated 100.000 plus in the 1970's to less than 30.000 in 1989 at a speed of perhaps 5.000 or more a year. While reorganizing and rehabilitating the reserve the success of anti-poaching was obvious. But at the same time it was realized that when poaching originated from villages outside the reserve, it was not sufficient to chase poor villagers inside. One had to develop better methods. It also became clear that wildlife education, revenue sharing and donating water pumps and school buildings, were equally not purposeful. Yes, people thought better about wildlife and the park afterwards, but poaching levels remained the same. Poaching had an economic basis and without changing the economic incentive system for the villagers, all efforts would bear no fruit. This was the lesson learnt in the Selous.

But involving people in order to reduce poaching and to improve conservation is only one side of the coin. The other side is more familiar to development workers: Involving people in the utilization of wildlife, because game is an important, nevertheless frequently overlooked resource in rural areas. A resource which can satisfy basic needs, if used wisely.

Therefore, Tanzania developed around the Selous and in other areas, the Serengeti, Ruaha, Wami-Mbiki, Saadani, an approach which aims at putting wildlife on village land under the management of the communities. Conserving wildlife in order to use it. **“Conservation by the people”** we called this approach when we started to develop it in 1986.

Nowadays 50 out of 80 villages around the Selous have created their own Wildlife Management Areas (WMA). The new official Wildlife Policy of Tanzania of 1998 has declared this “Community Based Conservation” (CBC) a country-wide approach. Regulations are being finalized and the revision of the Wildlife Act of 1974 to accommodate this new policy is well underway.

Under this CBC-programme villages carry out wildlife inventories, prepare management plans and finally declare part of their land as a WMA where sustainable wildlife use will be the predominant mode of production. The areas will be surveyed and demarcated and if they are not large enough villages can join together with neighbouring ones.

Whether use of wildlife is “non-consumptive” photographic tourism or “consumptive” in form of cropping, resident or tourist hunting will depend on the prevailing conditions and the decisions of the landholders, i.e. the villagers. Presently villages are not allowed yet to sell their quotas to safari hunting companies, as the new legislation is not in place. They are, however, under certain conditions already allowed to crop game, charge licence fees to resident hunters and enter into contracts with lodge operators

Wildlife ownership will be retained by the state in order to exercise control and avoid misuse. “Consumptive use” is therefore based on quotas granted and controlled by the Wildlife Division. Protection and anti-poaching is being done by village game scouts themselves who act as authorised officers and who are democratically elected by self-administration organs, called Natural Resources Committees. Ten years ago they were called Wildlife Committees, but meanwhile a similar concept has been developed for the management of forests and has been incorporated into the new Forestry Act.

Many crucial details have not been decided upon yet, and their development will depend on trial and error. But the guiding principle is the same everywhere: Wildlife management is to be devolved from Government to the grassroots, the major part of income, is to stay where it is created, and the whole process is to be democratically controlled.

The concept in Tanzania is clear. The official Wildlife Policy shows the way. However, practical implementation is slow and it remains unclear whether the administration is ready to surrender some of their rights and privileges to the small farmers.

III

Community Based Natural Resources Management in these days is mainstream, fashionable, politically correct and for some even a myth. Expectations are sometimes unrealistic, and some agencies which have propagated “fences and fines” for decades are jumping to the other extreme: Forget the stick, offer carrots on a silver plate and people will protect their wildlife. Unfortunately it is not that easy!

At the same time a good number of academic papers have already summed up “why CBC cannot work”.

Tanzania is presently moving from pilot projects to a national programme, from less than a hundred villages to hopefully soon a thousand. It is experiencing the practical obstacles in this challenging venture, but it is also observing the potential and the possible success.

As far as the critics are concerned there are a number of empirical answers:

1. CBC is no substitute for a protected areas approach. It is complementary. The Serengeti National Park will not be turned into a WMA of the surrounding communities. However, many unprotected areas which would otherwise be turned into maize fields and wheat farms, will receive a higher degree of protection of natural resources.
2. The policy may be Government driven, but the response is spectacular. In many cases villages have taken the initiative into their own hands, not waiting for the green light from Dar Es Salaam.
3. Anti-poaching by committed and trained village game scouts works, sometimes better than the official law-enforcement. But CBC is not there to replace it. Again, it complements. Anti-poaching by the Government is here to stay.
4. CBC in many cases will not be a tremendous addition to household income. But in practical life also the small things count. Meat is a precious luxury, and people are proud to look after wildlife, an important cultural asset, themselves. Improvements in crop protection are also a strong argument. Where safari hunting is possible, the income potential is indeed significant and can even compete with agriculture.
5. Rural people still have traditional knowledge of wildlife management. They are keen and able to learn additional modern techniques. Advice is, however, necessary. We shall see a private wildlife consultancy sector flourish.

6. Sustainability is a challenge, but this does not only relate to villages as decision makers. There is a lot of illegal use of the areas in question anyway, and to allow a certain legal off-take makes it more controllable and sustainable.

7. At some stage the Government might get scared of its own courage to have initiated such a major process of deregulation. But the Tanzanian Government is committed to see the process through. There will be losses of power and finance for the Central Government, but in the long run all sides will benefit.

8. Wildlife conservation and rural development are not conflicting targets. Game is an important economic resource in many rural areas. And its use is a nature-friendly option.

IV

In the early nineties the Selous Conservation Programme had employed an instructor in bush-craft, Mzee Madogo. He had already served in the fifties under the “father” of the Selous, Ionides, an eccentric whom the villagers called “mpalangozi”, the “one who skins snakes and flays people”. Mzee Madogo stated before he died of old age while on patrol in the Selous: “We used to fight the poachers at Madaba, which is right in the middle of the Selous. We still have to do this police-style work at Madaba. But as important is now what we do in the villages.”

Making predictions is difficult. However, here is an attempt: In fifty years from now Tanzania will still have a large biodiversity within National Parks and Game Reserves – even if these will be islands. How much wildlife there will be in the unprotected areas where it has to live side by side with a population which may have trebled by then - present growth rates prevailing –one cannot say. Whether CBC in the long run will be a sufficient incentive to retain this wildlife one equally does not dare to predict. But what can say with absolute certainty: Without Community Based Wildlife Conservation there will be no wildlife to speak of outside the protected areas in Tanzania in fifty years from now.

References

Barnett, R. (ed.) Food for Thought. The Utilization of Wild Meat in Eastern and Southern Africa. Trade Review. TRAFFIC East / Southern Africa. 2000

COMMUNITY BASED CONSERVATION: OLD WAYS, NEW MYTHS AND ENDURING CHALLENGES

**By
Prof. Marshall W. Murphree**

This document is Prof. Murphree's key address to introduce the third theme, “Community Based Conservation – The New Myth?” to the Conference “Wildlife Management in the New Millennium”, held at Mweka Wildlife College in December 2000. It has been included in this Discussion Paper with the kind permission of the author.

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 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.

Old Ways and New Approaches

“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. 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. All points 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.

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.

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.

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.

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 enforceive as a last resort if necessary.

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.

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.

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

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.

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.

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 neighbours. 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 appropriate 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

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.

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 and 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 Baldus (1987) and 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 Toennies’ distinction between *Gemeinschaft* and *Gesellschaft* (Toennies, 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)

References

- Adams, W.M. (1996) *Future Nature: A Vision for Conservation*. Earthscan, London
- Agrawal, A. (1997) *Community in Conservation: Beyond Enchantment and Disenchantment*. Conservation and Development Forum. Gainesville
- Baldus, R. D. (1987) *Wildlife – A Forgotten Resource*. In: *Internationales Afrikaforum*. 271-277
- Barrett, C.B. and Arcase, P. (1995) *Are Integrated Conservation Development Projects (ICDPs) Sustainable? On the Conservation of Large Mammals in Sub-Saharan Africa*. In: *World Development*. 23 (7) 1073-1085

Barrow, E., Gichohi, H. and Infield, M. (2000) Sustaining Eden: Rhetoric or Reality? A Review of Community Conservation Policy and Practice in East Africa. Evaluating Eden Series. IIED. Draft. London

Barrow, E. and Murphree, M. W. (2000) Community Conservation from Concept to Practice. A Review of Analytic Issues. In: Hulme, D. and Murphree, M. (Eds.) African Wildlife and African Livelihoods: The promise and Performance of Community Conservation. James Currey. Oxford

Bond, I. (2000) CAMPFIRE and the Incentives for Institutional Change. In: Hulme, D. and Murphree, M. W. (Eds.) African Wildlife and African Livelihoods: The Promise and Performance of Community Conservation. James Currey. Oxford

Bromley, D. (1994) Economic Dimensions of Community-based Conservation. In Western, D. and Wright, R. M. (Eds.) Natural Connections, Perspectives in Community-based Conservation. Island Press. Washington, D.C.

Child, G. (1995) Wildlife and People: The Zimbabwean Success. The Wisdom Foundation. Harare and New York

Constanza, R. (1993) Developing Ecological Research that is Relevant for Achieving Sustainability. Ecological Applications. 3 (2), 579-581

Fabricius, G., Koch, E. and Magome, H. (1999) Community Wildlife Management in Southern Africa: Challenging the Assumptions of Eden. Evaluating Eden Series. IIED. Draft. London

Fairhead, J. and Leach, M. (2000) The Nature Lords. After Desolation, Conservation – and Eviction: The Future of West African Forests and their Peoples. Times Literary Supplement, May 5

Hilborn, R. and Ludwig, D. (1993) The Limits of Ecological Research. Ecological Applications. 3 (4) 550-552

Holling, C. S. (1993) Investing in Research for Sustainability. Ecological Applications. 3 (4) 552-555

Holling, C. S. and Meffe, G. K. (1996) Command and Control and the Pathology of Natural Resource Management. Conservation Biology. 10 (2) 328-337

Hoyt, J. A. (1994) Animals in Peril. How “Sustainable Use” is Wiping Out the World’s Wildlife. Avery Publishing Group. Garden City Park. New York

Hulme, D. and Murphree, M. (Eds.) (2000) African Wildlife and African Livelihoods: The Promise and Performance of Community Conservation. James Currey. Oxford

Jones, B. (2000) The Evolution of a Community-based Approach to Wildlife Management at Kunene, Namibia. In: D. Hulme and Murphree, M. (Eds.) (2000) African Wildlife and African Livelihoods: The Promise and Performance of Community Conservation. James Currey. Oxford

Kaplan, A. (1999) The Development of Capacity. UN Non-Governmental Liaison Service. Geneva

Lee, K. N. (1993) Compass and Gyroscope: Integrating Science and Politics for the Environment. Island Press. Washington, D.C.

Murombedzi, J. (2000) Committees, Rights, Costs and Benefits: The Question of Natural Resource Stewardship and Community Benefits in Zimbabwe’s CAMPFIRE Programme. In:

Hulme, D. and Murphree, M. W. (Eds.) (2000) African Wildlife and African Livelihoods: The Promise and Performance of Community Conservation. James Currey. Oxford

Murphree, M. W. (1995) Optimal Principles and Pragmatic Strategies. Creating an Enabling Politico-legal Environment for Community-based Natural Resource Management. In: Rihoy, E. (Ed.) (No Year) The Commons without the Tragedy. Strategies for Community-based Natural Resources Management in Southern Africa. SADC Wildlife Technical Coordination Unit, pp. 47-52. Lilongwe

Murphree, M. W. (1996) Wildlife in Sustainable Development: Approaches to Community Participation. In: African Wildlife Policy Consultation. ODA. pp. 155-188. London

Murphree, M. W. (1997) Congruent Objectives, Competing Interests and Strategic Compromise. Concept and Process in Zimbabwe's CAMPFIRE Programme. Paper presented to the conference on "Representing Communities: Histories and Politics of Community Based Resource Management." Georgia, USA: 1-3 June. Helen

Murphree, M.W. (1998) Ex Africa Semper Aliquid Novi? Considerations in Linking African Environmental Scholarship, Policy and Practice. In: Christoffersen, N., Campbell, B. and duToit, J. (Eds.) (No Year) Communities and Sustainable Use: Pan-African Perspectives. IUCN/ROSA, pp. 3-7. Harare

Murphree, M.W. (1999) Enhancing Sustainable Use: Incentives, Politics and Science. Berkeley Workshop on Environmental Politics, Working Paper WP 99-2. Institute of Institutional Studies. Berkeley, California

Murphree, M.W. (2000a) Boundaries and Borders: The Question of Scale in the Theory and Practice of Common Property Management. Paper presented to the Eighth Biennial Conference of the IASCP, Bloomington (Indiana, USA) May 31-June 4

Murphree, M.W. (2000b) Community Conservation and Private Business: A Case Study from Mahenye, Zimbabwe. In: Hulme, D. and Murphree, M. W. (Eds.) (2000) African Wildlife and African Livelihoods: The Promise and Performance of Community Conservation. James Currey. Oxford

Oates, J.P. (2000) Myth and Reality in the Rainforest. How Conservation Strategies are Failing in West Africa. University of California Press. Berkeley, California

Patel, H. (1998) Sustainable Utilization and African Wildlife Policy. Indigenous Environmental Policy Center. Cambridge, Massachusetts

Sithole, B. (2000) Use and Access to Dambos in Communal Lands in Zimbabwe: Institutional Considerations. D.Phil. Thesis, Centre for Applied Social Sciences, University of Zimbabwe. 343 pp.

Sjoberg, G. (1964) Community. In: Gould, J. and Kolb, W. L. (Eds.) A Dictionary of the Social Sciences Glencoe. The Free Press, pp. 114-115

Toennies, F. (1963) Community and Society. Harper. New York. Originally published in German in 1859.

COMMUNITY BASED CONSERVATION: 13 YEARS OF EXPERIENCE IN TANZANIA

**By
Dr. Ludwig Siege**

Background

Contrary to public perception in Africa and by some scientists, CBC is not a new approach. It was and is widely practised for instance in Europe. Since the nobility were deprived of their privileges in the revolutions of the eighteenth and nineteenth centuries, landowners and communities, have managed their natural resources. In this they have been guided by laws and supervised by administrations supportive of community conservation (Balduş *et al* 1994).

CBC approaches involving harvests of wild animals are also quite common and have proven to be successful among indigenous communities in North America, Europe and in Asia.

In Africa, however, the element of central government control prevailed until fairly recently. This is understandable, because under colonial rule a strong central administration had been established in order to have power over and bring under central control the tribes and communities, which were seen as a source of trouble. Uprisings against the colonial powers continued until independence, re-enforcing the centralistic policies of colonial governments (Bell 1950).

If anything, independence brought about a strengthening of this trend. The new administrations feared the centrifugal powers of tribalism and, in the case of Tanzania, discouraged the traditional local structures. The traditional chiefs were done away with and local governments dissolved. Central government representatives were put into villages and services such as schooling, medical care and agricultural extension, but also protection of crops from wild animals were affirmed to be tasks of the government. The central government promised to take care of these aspects of village life and in fact managed to deliver, until in the seventies the economic performance began to slip and finances ran short.

This was also the case where natural resource and wildlife management were concerned.

Wildlife has traditionally been perceived as threat to crops and life as well as a source of meat and income through trade in wildlife products, mainly ivory.

The colonial governments, while to a certain extent recognising traditional rights of hunting communities by including elements of traditional wildlife use in their laws, introduced quotas, licenses and fees, regulations for firearms and conduct while hunting, which could not be met by the local people, thereby effectively excluding them from “modern” wildlife management.

As a rule the post independence governments went even further. In the new Wildlife Conservation Act (WCA) of 1974, Tanzania for instance cancelled the last elements of traditional wildlife use in the legislation. Under the previous law, the Fauna Conservation Ordinance of 1954, some communities still had the right to carry out hunting using traditional methods.

At the same time new protected areas were created at an accelerating rate and managed under what is called now the “fences and fines” approach. Communities were barred from entering and disturbing these areas, with a few exceptions such as the case of the Ugalla Game Reserve, where a special arrangement was introduced for fishermen and honey-producers. Wildlife outside of protected areas on village land was perceived as a pest and severely reduced in crop protection schemes. For instance, up to the early seventies between 2000 and 4000 elephants were shot by government scouts every year as part of crop protection in Southern Tanzania alone (Stronach, Siegel, 1995, Rodgers *et al* 1982).

The prevailing attitude during this period by both conservationists and game wardens was to regard every local villager as a potential poacher. Police action, rifles and handcuffs were regarded by the authorities as the instruments to settle this conflict. This approach was based on the illusion that governments everywhere on the continent were in control of the natural resources and were able to protect them countrywide. In reality African administrations and economies started to under perform soon after independence. Often government officials and institutions got involved in or even were in the forefront of poaching. While the protection of

wildlife inside the parks and reserves could to a certain extent be maintained by the “fences and fines” approach, at least in Southern and Eastern Africa, very little effective law enforcement took place outside these protected areas in most of these countries (Western 1994).

As a result wildlife resources outside parks and reserves were being "mined" at levels that could not be sustained.

A Short History of CBC

New approaches to tackle the issue of wildlife on communal land outside protected areas had to be developed. Practises of wildlife management from outside Africa, which seemed entrenched and workable, were looked into as models. The basic principle of these practises is that natural resources are managed by the people or institutions that own them or live with them. This could be private landowners or communities but also the state in case of state-owned protected areas.

New political perspectives in Africa such as decentralisation, participation and political pluralism emerged at the same time, all together forming a basis for developing the first community based wildlife management concepts.

In the middle of the eighties several CBC-approaches came into being in Southern Africa. The largest and best publicised of these is Zimbabwe's CAMPFIRE and Zambia's ADMADE (Martin 1986, Lungu 1990). They have in common that they aimed at introducing new management regimes for wildlife on communal land, where there had effectively been a management vacuum before. This vacuum had occurred due to the weakness of the governments to implement their wildlife legislation outside parks and reserves. The programmes had also recognised the fact that in many of the Southern and Eastern African countries a considerable portion of wildlife lives outside protected areas. For instance 20,000 of the close to 60,000 elephants of the Selous ecosystem live on village land (Siege 2000). Even in Kenya less than half of the wildlife occurs inside the NPs.

Other countries like Namibia and Botswana followed suit as did Tanzania with its Serengeti Regional Conservation Strategy (SRCS) in 1986 and the Selous Conservation Programme (SCP) in 1987. Both programmes introduced community based wildlife management outside the respective protected areas. They aimed to establish bufferzones to improve protection of the core protected area. The SCP has gone beyond that in the meantime. Villages quite a distance from the reserve are now practising CBC.

It is important to note that none of these projects tried to restructure the management of the protected areas, apart from asking the management of these areas to cooperate with and to make use of the village law enforcement organs in antipoaching.

The rapid proliferation of the CBC-approaches all over Africa illustrated the appeal, which this approach held for policy makers, wildlife managers, scientists and last but not least, donors. This appeal is understandable, because for the first time there was an workable approach to protect wildlife outside protected areas, which went beyond law enforcement and centred around the self interest of communities, linking wildlife conservation and rural development.

When analysing the different initiatives it becomes apparent that there is no common approach to CBC, but that there are some common principles:

- Communities manage and utilise wildlife in their own long term interest according to land use and management plans.
- Usually areas for wildlife management are defined in these plans
- Ownership rights or long-term user rights of wildlife are granted to the communities
- Communities protect the resource with their own scout force.
- Annual offtake, if any, is limited to sustainable levels.
- Community leaders have a steering function, but the internal process of decision making in the communities is left to the village. Projects and administrations usually insist on transparency of decision making and administration of funds.

- Authorities on District and Central Government level control, advise and promote. Strict supervision by the authorities concerned is regarded as indispensable in order to prevent malpractices.
- Main activities of wildlife management are antipoaching and tourism related supervision (hunting and photographic tourism).
- How benefits are used or shared differs from country to country and even within projects.

Case Study: The Selous Conservation Programme

The 51 out of 85 villages in the scheme around the Selous have developed land use plans with the assistance of the respective Land Offices. The land use survey includes the provision of land certificates to the villages. Amongst other forms of land use, Village WMAs have been demarcated as areas for sustainable wildlife utilization.

The villages benefit directly through allocation of a sustainable hunting quota and, in one case so far, from a tourist lodge. In return the villages are required to appoint and equip village scouts, who patrol their Village WMAs. Natural resource committees are established at village and District level. The village scouts and village officials are trained in the Government training centre at Likuyu (Community Based Conservation Training Centre, CBCTC).

Training in basic management tools like bookkeeping, planning, budgeting is also carried out by the District Community Development Officers.

The District Game Officers (DGOs) are trained and put in charge of the supervision of the programme in their Districts.

The villages derive revenue from the sale of meat from their quota within the village, from tourist operations and from the management of resident hunting. They also carry out crop protection themselves (Baldus et al 1994).

The revenues from Safari hunting still go into government coffers, but the new WPT stipulates that in the future a large share should accrue to the village. The Ministry is presently working on the regulations to put the policy into practise.

The programme is internationally regarded as success:

There is evidence that poaching in the village areas has decreased significantly, and that wildlife is now coming back to areas where it had been absent for many years. This is mainly due to improved antipoaching by the villages themselves (Nuding 2001). How much change of attitudes in the communities away from poaching is contributing to this, is difficult to assess, as poaching is by nature a secretive occupation.

Districts and villages are queuing up to join the scheme so that applications for support have to be rejected due to lack of manpower and funds. Consequently some villages have gone ahead on their own without support from SCP. One District (Masasi) is now going ahead on its own by sending village scouts to the training centre in Likuyu.

What makes the scheme attractive is evident: For the first time communities have the opportunity to take charge of and to make decisions about important resources on their land. This certainly appeals to village leaders. On top of it they get some income for development purposes. In most of the villages under the SCP this is by far the highest source of revenue in the village. Very important is that their scout force is able to protect them from crop raiders and dangerous animals, because villages can own firearms and have the trained personnel to use them (Masunzu 1998).

Common Criticism on CBC:

Recently contributions on CBC with a negative spin have appeared in scientific and other publications (eg. Songorwa et al 2000). After up to 15 years of experiences with the approach this was to be expected. It is noteworthy, however, that with a few exceptions (eg. Marks

1984, 1999) these critics do not speak from practical experience or from extensive field research. Consequently they tend to misunderstand what CBC is about and their critical analyses often hinge around their misconceptions of CBC rather than on what CBC is in reality.

One type of criticism is decidedly biased: In many cases CBC involves sustainable utilisation in the form of hunting. The animals rights' and anti hunting lobby has consequently joined the debate in order to discredit sustainable wildlife utilisation schemes without any real interest to discuss the merits and demerits of the approach.

The arguments found in the scientific literature on CBC centre about (Songorwa et al 2000):

1. CBC has been introduced to replace the law enforcement orientated approach, because this approach has failed
2. The CBC approach is government and donor driven and top down; it is not based on traditional knowledge
3. CBC is based on unrealistic assumptions. In reality:
 - a) Communities are not interested in taking up CBC, because it does not produce enough benefits for the communities as compared with the disadvantages of wildlife
 - b) Central governments are not willing to devolve responsibility over natural resources, because of the "bureaucratic impulse" to hold on to power, the fear to loose control over developments, and the view that wildlife is a national heritage and therefore has to be managed on central level
 - c) Communities are not capable of managing wildlife, because CBC is alien to them; it is not based on traditions and some aspects are beyond their competence
 - d) Wildlife conservation and rural development are conflicting objectives. Villagers expect development, proponents of CBC expect conservation. There is a trade off between these targets. The villagers access to land is reduced by CBC, and short term economic interests on the side of the villages might lead to over-exploitation of wildlife.

Ad 1:

CBC has been introduced to replace the law enforcement orientated approach, because this approach has failed

An analysis of the different CBC approaches all over Africa shows that nowhere has CBC replaced law enforcement. CBC has always supplemented and even enforced it. Law enforcement approaches have been quite successful in a number of countries, in particular in Southern Africa, but also in Eastern Africa, as far as their protected areas are concerned (with the exception of elephant in Eastern Africa and the rhino everywhere in the 70ies and 80ies).

There is no case where on community land wildlife laws have been withdrawn and laissez faire management has been allowed, nor have state owned protected areas been handed over to communities.

Under CBC law enforcement is strengthened by the anti poaching operations of the village scouts. Districts in Tanzania, for instance where CBC is practical, now rely heavily on village scouts for antipoaching, because in the course of the decentralisation process, with few exceptions, their own scout force has been cut to virtually zero. CBC has in some instances been criticised because its success depended on increased law enforcement. The critics fail to recognise that law enforcement is one important element of CBC.

Ad 2:

The CBC approach is government and donor driven and top down, it was not developed from within the communities

It is certainly true that the modern CBC schemes are as a rule not rooted in African traditions. But the same holds true for African government ministries, modern health and school services, for African sports administrations etc.. Yet these institutions are considered necessary and workable and they receive international support. Development goes along with

social and institutional change and nowhere in the past 150 years has the social change been as dramatic as in Africa. New concepts are not bound to fail because their origin is not domestic, they fail when they are ill conceived or contradict existing social structures, cultures and beliefs.

In Tanzania the history of modern so called "grassroot" action and movements has been one of failure. Scepticism about CBC is therefore understandable. Co-operative movements were imposed on communities and with a few exceptions collapsed because of mismanagement and corruption.

When in reality the communities queue up to join the scheme, and even start operations on their own without any support - as is the case in the SCP area - the above argument becomes irrelevant anyway. Presently there seem to be strong incentives for communities to join, which override scepticism and the fear to be cheated.

The approaches taken by the respective projects in Botswana, Namibia, Zimbabwe, Zambia and Tanzania, to name the most important countries, are quite varied. There is obviously no blueprint for CBC and even if the start was externally induced, the countries have developed their own workable adaptations of the basic concept.

Ad 3 a:

Communities are not interested in taking up CBC, because it does not produce enough benefits for the communities as compared with the disadvantages of wildlife

Wildlife is commonly seen by Tanzanian villagers as dangerous and destructive. It is difficult for them to appreciate the beauty of a herd of elephants, when this herd is in the process of destroying their crops (Gillingham 1997). They themselves are usually not able to effectively drive the crop raiders from their land, but have to rely on district scouts to carry out the problem animal control. When the district scout force was shifted from central government to the Districts in 1995, most Districts dismissed up to 75% of them. The remaining few, for instance 5 in a District like Rufiji, which is extremely rich in wildlife, clearly cannot cope with this task (Masunzu 1998). CBC has now given the villages in the scheme the means to carry out problem animal control themselves. Weapons and non lethal means to drive animals off have been acquired. This has increased the reputation of CBC in the villages tremendously and might be a major incentive to participate.

The crop protection problem will become more dramatic in the future, as animals and human populations increase. But with CBC and the means to carry out crop protection, communities are better off as compared to the situation without, when they had to rely on outside assistance.

The financial returns from wildlife management for villages depend on the quality of the wildlife area and the management regime, which determines how the revenues accrued are distributed (Gillingham 1998). In the area of the SCP the main income potential of communities rests with safari hunting. A good hunting block can produce between 50,000 and 100,000 US\$ per year for the Government. Unfortunately communities are not yet entitled to this income, because safari hunting is administered by the WD and the majority of the revenues goes straight to the central government. This is resented by the villages, because the demanding task to manage the wildlife rests now with the village, but tens of thousands of US\$ earned from Safari hunting are bypassing them.

Under a decree by the Prime Minister a nominal 25 % of the safari hunting revenues of the Districts are channelled back to communities via the Districts, but in the case of the Selous the actual share is less than 10 %, because it is calculated after different retention schemes have deducted their share in advance. In the case of Liwale for instance, the amount available is around 30,000 US\$, which have to be shared among around 20 villages. The Districts are supposed to pass these funds back to the communities where wildlife revenues are generated. SCP has in several cases facilitated this, because some Districts were reluctant to part with the money.

Sale of meat and resident hunting schemes can produce 2,000 to 3,000 US\$ per year per village (Gillingham 1998).

Photographic tourism is now picking up in the Selous and the first contract between communities and a lodge owner on the Selous border has been signed in 1999. The volume of the contract is around 200,000 US\$ over 10 years.

Average annual village budgets are normally less than 1000 US\$, if income from wildlife is not included, so by village standards these are considerable revenues and the income through wildlife is as a rule highly appreciated in the village.

When, as the WPT stipulates, the revenues from safari hunting become available to the communities, the income will increase manifold, thereby further increasing the incentive to practise CBC.

Other benefits of CBC are meat and jobs. There are also immaterial advantages in the fact that to have a functioning village "police" means to have decision making power and to be able to meet government law enforcers as "equals".

Ad 3. b:

Central Governments are not willing to devolve responsibility over natural resources, because of the "bureaucratic impulse" to hold on to power, the fear to loose control over developments and the view that wildlife is a national heritage and therefore has to be managed on central level

This could certainly be a valid argument. If government is not willing to hand over responsibilities to decentral levels CBC cannot work. One has, however, to look at every particular case.

In Tanzania the WPT clearly expresses the intention to devolve powers to the communities. As everywhere the government is not monolithic. There are officials at the middle level of the central government, who might fear to lose authority, influence and also income opportunities, if responsibilities are transferred to districts and communities. The top decision makers in the country, however, seem to be determined to go ahead with the process to implement the WPT. For 13 years now pilot projects have been implementing CBC in Tanzania. Their experiences have been fed into the process to develop the WPT and the regulations to implement them.

Communities all over the country have been informed about the policy and are now demanding permission to practise CBC, thereby creating a dynamism, which seems to be irreversible.

Ad 3 c:

Communities are not capable of managing wildlife, because CBC is alien to them, it is not based on traditions and some aspects like accounting are beyond their competence.

The administration of CBC on village level, which involves collection of funds, accounting and budgeting, is not different from for instance the administration of local water schemes, which have now been in existence in many places in Tanzania for decades. The view that the administration of CBC is too demanding for the community members underestimates their abilities. Experiences gained in the SCP show that some villages are actually quite outstanding at it.

An important aspect and also an important cost factor of all CBC schemes is training. Tanzania has installed a training institution for village scouts and village functionaries in Likuyu-Sekamaganga and recently the training institution for government scouts at Pasiansi too has offered courses for village scouts. Curricula comprise the basic knowledge necessary to manage wildlife on village land. However, without guidance and on the job training from the wildlife authorities most communities would be in difficulties to carry out their CBC activities properly. A back up system, provided by the District Natural Resources Office, usually through the DGO is necessary at least for the starting phase.

Available traditional and local knowledge comes in useful. Some important elements of CBC operations are based on local knowledge. It is not by accident that in most communities among the first scouts selected for training is the local "Mrumba", the traditional hunter. Antipoaching, hunting and basic ecological monitoring can be very effectively carried out by people who are familiar with their surroundings. Surveillance of the wildlife areas is more or less continuous and the performance of the "on site enforcers" with local knowledge is as a rule superior to scout forces alien to the area.

On the other hand, traditional hunting methods, which have been tested intensively in the Serengeti project (hunting with bow and arrow, poisoned and not poisoned), have been found not to be effective. Other traditional methods like snaring and pitfalls are non-selective and wasteful and therefore not acceptable. The rifle is nowadays the accepted way of hunting and local knowledge how to use it exists. After all the Mrumba used it as poacher in the past! At the same time the rifle is an anti poaching tool, which village scouts forces have to possess anyway.

Setting sustainable hunting quotas is a specialist task. The necessary animal counts are usually carried out by specialist agencies like the Tanzania Wildlife Conservation Monitoring (TWCM). It is evident that the communities need assistance in quota setting, but they themselves can greatly assist in collecting the necessary data for it.

Ad 3 d:

Wildlife conservation and rural development are conflicting targets, because:

- **Villagers expect development, proponents of CBC expect conservation. There is a trade off between these targets.**
- **The villagers access to land is reduced by CBC,**
- **Short term economic interests on the side of the villages might lead to over-exploitation of wildlife**

In principle conservation is not regarded by science to be detrimental to development. Agenda 21 is based on the view that in the long run development cannot take place with depleted and destroyed natural resources. Wherever wildlife exists it is an indicator for a relatively unspoilt environment, which has retained its function for climate, water and agriculture.

However in the poor economic situation the average villager finds himself in, his short term interests normally prevail over long term considerations. Conservation education programmes have a difficult task trying to teach villagers to take the long term view. In order to be successful, CBC has to have "short term" appeal (see 3.a).

The question, whether wildlife conservation can contribute to rural development can only be looked into in the specific contexts of the different programmes. In case of the SCP, the access to land for farming is in most of the communities not a limiting factor, as the village areas are vast, population density low and the demand for land for agricultural activities limited. Even though the people practise shifting cultivation, their demand for agricultural land is much lower than in pastoralist communities.

The designation of WMA's is based on zoning plans, which have been developed by the villages together with the respective land planning officers from the districts. Even though they are probably not satisfying to everyone in the village, they are approved by the village government. Further they form the basis for certificates of village land under the new Village Land Act, which for the first time gives villages formal security over their land.

Short term interests that might lead to overexploitation of wildlife are controlled by the quota setting process supervised by the District officials and WD. Quotas have to be sustainable, which means that the harvest must not in the long run lead to a reduction of the biodiversity. In Tanzania, in most areas illegal offtake is by far the bigger problem than legal over-exploitation. Combating poaching has to be a priority in wildlife management, and CBC is one important strategy to strengthen antipoaching. In case of villages violating the agreements and laws governing CBC, sanctions have to be imposed by the District and the Government. These sanctions are part of the regulations of CBC.

Conclusion:

CBC centres around the main actors in conservation, the land owners, and takes their immediate interests into account. It is a pragmatic approach, but has often been ideologically clouded and mystified, even by its creators. It has had targets and effects ascribed to it which were simply unrealistic and could not be fulfilled. It is not a panacea to solve Africa's problems in wildlife conservation, but it can help improve wildlife management outside protected areas. At the same time CBC can provide incentives and some returns for rural development in remote and disadvantaged communities.

References:

Baldus, R. D., Krischke, H., Lyamuya, V. and Ndunguru, I. F. (1994) People and Wildlife, Experiences from Tanzania. SCP Discussion Paper No. 16. Dar Es Salaam

Bell, R.M. (1950) The Maji-Maji Rebellion in the Liwale District. Tanganyika Notes and Records. 28, 338-357

Gillingham, S. (1998) Giving Wildlife Value: A Case Study of Community Wildlife Management Around the Selous Game Reserve, Tanzania. Ph.D. Thesis. Cambridge University

Gillingham, S. (1997) Conservation Attitudes of Villagers Living Next to the Selous Game Reserve, Tanzania. SCP Discussion Paper No 23. Dar Es Salaam

Gillingham, S. (1998) Do All Peasant Farmers Look Alike? The Socio-Economic Context for Community Wildlife Management around the Selous Game Reserve, Tanzania. SCP Discussion Paper No 22. Dar Es Salaam

Government of Tanzania (1998) The Wildlife Policy of Tanzania, Government Printers. Dar es Salaam

Lungu, F. (1990) Luangwa Integrated Rural Development Project (LIRDP) and Administrative Management Design (ADMADE) Zambia. In: Kiss, A. (1990) Living with Wildlife: Wildlife Resource Management with Local Participation in Africa. World Bank Technical Paper 130. Washington D.C.

Marks, S. A. (1984) The Imperial Lion: Human Dimension in African Wildlife Management. Bowker. Epping

Marks, S. A. (1999) Contextual Factors Influencing the Community and the Development of a Wildlife Management Regime in Zambia (1987 –1997). In: Journal of Environmental Policy and Planning

Martin, R. B. (1986) Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). Harare

Masunzu, C. (1998) Assessment of Crop Damage and Application of Non-Lethal Deterrents for Crop Protection East of the Selous Game Reserve. Tanzania Wildlife Discussion Paper No. 24. Selous Conservation Programme. Dar es Salaam

Nuding, M. (2001) Best Practices in Natural Resource Management. Wildlife in the Development Cooperation Context. GTZ-TOEB. Eschborn

Rodgers, W.A., Lobo, J.D. and Mapunda, W.J. (1982) A History of Elephant Control in Tanzania 1919-1976. Tanganyika Notes and Records. 84/85, 25-54

Siege, L. (2000) From Decline to Recovery. The Elephants of the Selous. Tanzania Wildlife Discussion Paper No. 27. Dar Es Salaam

Songorwa, A. N., Buehrs, T. and Hughley, K. F. D. (2000) Community Based Wildlife Management in Africa: A Critical Assessment of the Literature. In: Natural Resources Journal 40 (2), 603-643

Stronach, N.R.H. and Siege, L. (1995) The Elephants of the Selous Game Reserve and Their Management. Tanzania Wildlife Discussion Paper No. 19. Dar Es Salaam

Western, D. and Wright, R. M. (1994) Natural Connections: Perspectives in Community Based Conservation. Island Press. Washington D.C.