



Dr. Rolf D. Baldus

A Practical Summary of Experiences
after Three Decades of
Community-based Wildlife
Conservation in Africa
“What are the Lessons Learnt?”



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Experiences after Three Decades
of Community-based Wildlife
Conservation in Africa
“What are the Lessons Learnt?”

By Dr. Rolf D. Baldus

With five Annexes by
Rolf D. Baldus, Vernon Booth,
Rudolf Hahn, Dr. Stuart Marks,
Catherine Picard and Chris Weaver

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LIST OF ABBREVIATIONS

ADMADE	Administrative Management Design for Game Management Areas
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CBC	Community-based Wildlife Conservation
CBNRM	Community-based Natural Resources Management
CBO	Community-based Organisation
CBWM	Community-based Wildlife Management
CIC	International Council for Game and Wildlife Conservation
FAO	Food and Agriculture Organisation of the United Nations
LIRDEP	Southern Luangwa Valley Integrated Resource Development Project
NGO	Non-Governmental Organisation
SCP	Selous Conservation Programme
TAHOA	Tanzania Hunting Operators Association
WMA	Wildlife Management Area

PREFACE

by Dieter Schramm
President International Council for Game and Wildlife Conservation (CIC)

Africa's wildlife is under siege - no doubt. The loss of habitat that results from population growth, poaching and unsuitable wildlife management drive the wonderful and valuable natural resource "wildlife" into extinction at many places. Well meant hunting bans in some countries have speeded up the decline.

In Southern Africa private game ranches had surprising results: Wildlife numbers have soared and game roams on land where it became extinct decades ago. In other countries wildlife is owned and managed by the state, and this has mostly not been a success.

For thirty years community-based conservation of wildlife has developed as a third option. It has proved successful in several countries, where the Governments have been sympathetic and supportive. In other cases, it had limited success only, in particular as a result of bad Governance. Recently this approach has been criticised by animal welfare groups, which are opposed to hunting.

The CIC and the Food and Agriculture Organisation of the United Nations, which have an ongoing cooperation programme on wildlife conservation, found that it is about time to critically review and summarise the experiences of the last three decades in order to draw conclusions for future successful wildlife management and for strategies to reduce or stop the loss of biodiversity.

The paper was commissioned at a good point in time. While this study was being concluded, the Nobel Prize in Economics was awarded to Professor Elinor Ostrom for her work on the sustainable use of commons through community institutions. The CIC regards this choice as an encouragement for community-based conservation of wildlife. This study shows that such an approach is without alternative in many developing countries. In addition it gives recommendations on how best to organise the collective institutions and the operational procedures and how to optimise support programmes.

PREFACE

by Gaoju Han
Head of the FAO Sub-regional Office for Southern Africa

Southern Africa has a long record in experiencing community-based wildlife conservation, an approach that has been pioneered since 1980's by the well known Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe, and subsequently implemented in various countries in the Sub-region under different names and with slightly different approaches and variable results.

After a period of strictly centralized wildlife management and exclusive wildlife conservation, there has been a commendable attempt to balance the needs for conservation with these for rural development. The key was to promote sustainable use of wildlife resources for the benefit of rural population.

Food security and poverty alleviation being the core concerns for FAO, this approach was perfectly in line with FAO programme and has been supported from its very beginning by various FAO projects and initiatives at national and international levels. The Community Forestry programme of the FAO Forestry Department provided technical assistance to member countries to build capacities and empower communities to effectively implement community based natural resources management.

Many other technical or development agencies and donors supported the community-based natural resources management over the years and experienced various challenges related to its effective implementation.

I therefore very much welcome this new publication contributing to our ongoing joint FAO/CIC initiative to share best practices and experience in wildlife management and conservation.

The paper provides a summary of practical experiences from community-based wildlife conservation mainly from Southern and Eastern Africa, as well as a valuable set of lessons learnt that, I believe, to serve decision-makers and practitioners in planning and implementing of community-based wildlife conservation programmes in their countries, in Africa or elsewhere.



I thank the authors of the annexes for their contributions and the cooperation. My thanks are also extended to Ivan Bond, Tom Bromley, Fred Nelson and Khanh Tran-
anh for providing papers and information.

I thank Lena Baldus, Aline K hl, Dominique Reeb, Ludwig Siege, Kai-Uwe Wollscheid and in particular Rene Czudek for reviewing and commenting the text and for corrections. As in earlier publications Andrew Cauldwell played a special role by both providing inputs based on his community-based wildlife experience in Tanzania and assistance with proof reading.

I am aware that the paper would benefit from further comments, and critique is therefore invited.

Rolf D. Baldus

“The recognition that nature conservation is fundamental to survival is reflected in ancient spiritual, cultural and material traditions of all continents. But in all such traditions, nature and culture were a continuum or even part of each other, and not separated. Sometime in the last century or so however, the formal conservation movement appeared to lose sight of this. It attempted to separate people from wildlife, and focus on islands of wildlife concentration where intensive conservation efforts could be directed. This was perhaps understandable given the enormous and very visible crisis of biodiversity loss. But we are now realising that exclusionary conservation is simply not sustainable even if it managed to stave off some extinctions and save a number of crucial habitats for a time. Nor is it ethically justifiable when imposed by those who have adequate means of livelihood and even luxuries, on those who are already living on the edge.”

Ashish Kotari in “Parks”, 2008

This publication has been prepared as another joint initiative by the International Council for Game and Wildlife Conservation (CIC) and the Food and Agriculture Organisation of the United Nations (FAO) and should complement the series of joint publications aiming at reviewing and summarizing experiences from sustainable wildlife management and disseminating lessons learnt.

Four particularly relevant cases have been summarised and added as the following annexes:

- 1) Stuart Marks provides a review of the longest (1966-2006) field study on continuity and changes in beliefs and uses of wildlife by one small scale African society. He reviews the “lessons learnt” that might be helpful for wildlife managers.
- 2) Vernon Booth presents the “lessons learnt” from CAMPFIRE, the founding “mother” of all African CBC programmes.
- 3) Rudolf Hahn, Catherine Picard and the author describe the evolutionary process of CBC in Tanzania, a country with a great potential, outstanding enthusiasm from communities, a good Government policy and strong donor support but disappointing results.
- 4) Chris Weaver presents Namibia as a contrast and points out why CBC has produced such good results in that country.
- 5) As a final case and annex the author added an example of communal management of a forest and communal ownership of hunting rights from his home village in Germany.

Although this paper focuses on an African development agenda, the author, within his professional capacity and as President of the CIC Tropical Game Commission, was able to confirm that the issues at stake are similar and comparable in other continents and regions, for example in Central Asia. The main “lessons learnt” and management proposals apply equally there.

„What is common to the greatest number has the least care bestowed upon it. Everyone thinks chiefly of his own, hardly at all the common interest.“

Aristotle

The author of this paper has been involved in the practical implementation of community-based management of wildlife and forests in his home-country Germany for 45 years. During his academic life and a further eight years as a professional development-policy consultant he was able to study and coach self-help projects amongst the rural poor in Africa, Asia and Latin America. These experiences, paired with a passion for wildlife, led to his occupation with Community-based Wildlife Conservation (CBC) in Africa. He had the privilege to study such CBC approaches since the early 1980’s and as a civil servant to supervise projects of bilateral and multilateral development agencies in many parts of the world. For a period of 13 years he was directly involved in executing CBC-projects in Tanzania and advising the Tanzanian Government on the development and application of its wildlife policy, a wildlife act and CBC programmes on the ground, in particular around the Selous Game Reserve. This is diverse and hands-on experience with communities and wildlife management over several decades provides a sound and empirical basis for this paper.

Nothing less than a menagerie of scientific, pseudo-scientific and other literature on the topic of Community-based Wildlife Management now exists. The intention of this paper is not to add another scientific paper to this excessive collection, but rather to condense the wealth of information and to extract the most important and fundamental experiences in a manner that can be understood by conservation managers and political decision-makers. The paper therefore concentrates on:

1. Wildlife, leaving out other natural resources like forests, and
2. Village land outside protected areas.

This paper does not cover outreach programmes, collaborative management of national parks and similar community-based programmes in the field of natural resources.

Quotations are kept to the minimum for the sake of easy readability. Only in the case of direct quotes is the source provided. A bibliography at the end provides a list of the literature consulted. As Tanzania serves as an important reference for this study, the author returned to the country for about three weeks in June 2009 and held a number of interviews on recent developments with numerous resource persons from the Governmental, private and NGO sectors. He also revisited several Wildlife Management Areas (WMAs) in the buffer zones around the Selous Game Reserve and in the Selous-Niassa Wildlife Corridor to evaluate developments that have taken place there since leaving the country in 2005.



2. EXECUTIVE SUMMARY

This paper sums up the practical experiences collected during the past three decades with CBC in Southern and Eastern Africa. The picture from the field is not consistent. Successful cases exist as well as unsuccessful ones. Their causes and determinants are identified, and key reasons for success or failure are discussed with emphasis on the role of governance, bottom-up versus top-down approaches, the need for governments to devolve power to the communities, the role of governments, donors and non-government organisations in the initiation and implementation of CBC such as training, facilitating and development of a legal framework, and particularly those areas where these players do not have a role. Common criticisms levelled at CBC programmes are evaluated and discussed in detail. Some of these have merit, while others are mere sour grapes or purposeful attempts to derail CBC.

Some proponents of CBC advocate a return to the old “fences and fines” approach, which was responsible for some of the greatest losses of wildlife on the African continent. A return to these outdated forms of conservation would further this loss, yet under CBC schemes many wildlife areas have enjoyed greater protection and populations increased, while at the same time the development of communities has been promoted and steps towards an escape from poverty and self-determination have been achieved. Although failures do exist, the concept of CBC has been widely successful and continues to present the only viable option to combine wildlife and biodiversity conservation with rural development and poverty reduction in the vast unprotected areas of Africa where much wildlife still currently roams free.

Four case studies compiled by different authors present the particularly relevant cases of Namibia, Tanzania and Zimbabwe and the longest existing study of traditional cooperation, a case from Zambia.

“Every forestry department would be well-advised to make it their aim to use the state forests in such manner as would permit future generations to derive at least as much benefit from them as the present generation.”

Georg Ludwig Hartig, 1804



One single greatest factor in ensuring conservation of biodiversity, the survival of wildlife and the continuing existence of wild places in Africa is the complicated interface between rural people and wildlife.

In the early days of modern conservation the answer was simple: Declare suitable land as a protected area, move the people out, erect a virtual fence and nature will flourish inside, as it has done since time immemorial. As time went by many of the virtual fences were turned into real ones. National parks became islands surrounded by populations that had often converted their lands into dustbowls and then looked with greedy eyes towards the green grass and the juicy-legged chunks of meat behind the fences. As a result the islands had to be upgraded into "fortresses" to be defended against those "greedy" people surrounding them. Invariably the reality was that neither the African Governments nor their wildlife authorities, which were assigned this task, were able to defend these "fortresses" efficiently.

This protectionist approach has in some instances been successful in conserving the biodiversity of the forests, wildlife, water, soil (mostly in national parks) that would otherwise have been turned into maize fields, grazing grounds or dustbowls. Reality has, however, frequently shown that this "fortress" mentality has seldom worked out as intended. Although many national parks and reserves were thus created, these did not necessarily conserve wildlife and nature, and there is a multitude of reasons for this. Most importantly, neither the wildlife nor the people respected the boundaries of these protected areas. The former ate people's crops and sometimes even the people themselves, while the latter transgressed inside the vast forbidden lands, either to feed their cattle or to harvest the abundant bush meat for food and commerce. Permanent contact was inevitable, with the result that many of the parks existed as nothing more than protected on paper, but not in reality. The exclusionary approach had backfired on conservation itself. Secondly, it is not seen as politically acceptable anymore when those who have an adequate means of living, and do not suffer the costs of living with wildlife, impose exclusionary conservation laws on people who already live a marginal life, often below poverty levels. Such rules can be interpreted as a violation of the basic rights of the people affected. A number of parks have caused further impoverishment of people through displacement or loss of access to resources.

Apart from the protected areas there was another issue – the wildlife on communal land. With the coming of modern legislation, traditional approaches towards wildlife use became increasingly regulated and controlled. Most traditional forms of wildlife use were declared illegal and culprits were fined or imprisoned. The village hunter was labelled a poacher and criminalised. Control was to some extent justified, as a growing human population and increased hunting efficiency made the traditional wildlife uses increasingly unsustainable. However, the affected people were never consulted. They were the subjects of a wildlife policy imposed from above. Needless to say, the authorities had neither the means nor capabilities to implement their own laws, and unsustainable wildlife use became, second to loss of habitat, the most important reason for the disappearance of wildlife in many places.

In recent years it has become obvious that protected areas cannot exist in isolation. In many cases more wildlife still exists outside of the protected areas than within. Biodiversities inside and outside are strongly connected and mutually dependent on each other, and there is a strong interaction between the local people, the natural resources and the protected areas.

New concepts for institutional reform began in the early 1980's, which revolved around the possible inclusion of rural people into wildlife conservation and management. Such concepts were based on the assumption (or expectation) that wildlife management could become more effective and wildlife use increasingly sustainable if the local users were able to manage, or at least be involved in the management of the resource, and if they could benefit from it. The reality of such ideals has however proven that wildlife, like forests and other natural resources in Africa were treated as "open access" resources and thus suffered from the "tragedy of the commons": Every individual tries to maximize his/her personal consumption, even if as a whole the "commons" are damaged. Vesting user rights on the groups which have access to the resource and which are using and managing it cooperatively was later seen as a possible corrective, thereby doing away with the commons.

It is now generally agreed that police and command systems have not served conservation well because the Governmental structures are unable to enforce them, although other reasons also exist. One fundamental reason for this failure is that in reality every person pursues his/her own economic interests. People will always find a way around the laws, economic regulations and bans, particularly in Africa.



All communist command systems have failed for this reason. Market economies generally perform better provided they are based on open competition and not on monopolistic or oligopolistic power. Therefore the secret of any successful economic system is whether it succeeds in allowing individuals to strive for their own advantage while they simultaneously and actively contribute to higher objectives, which are positive for society as a whole.

CBC was conceived as such a system. It is based on the assumption that the interface between rural people and wildlife is dependent upon incentives. CBC aims to achieve results in conservation and rural development by creating economic incentives and suitable proprietorship. The necessary institutional reforms therefore had to be closely connected with the devolution and decentralisation of formerly centralised decision-making. Such approaches link biodiversity conservation with rural socio-economic development in a way that benefits local communities. The aim was conservation, but at the same time improved rural development and combating poverty. The guiding assumption was that people who benefit directly from the use of natural resources will develop an interest to protect these resources and to limit their use to sustainable levels.

There is a third approach to convince rural people to commit themselves to conservation. It consists of appealing to them to protect wildlife, as it will otherwise go extinct. This has been widely attempted by animal preservationists, yet there is little evidence that it has ever worked in reality. Wildlife education and the reference to the intrinsic values of animals might enlighten the rural dwellers and might encourage them to think about animals more positively and more often. Positive attitudes towards game do, however, not necessarily lead to positive conservation action. They may influence, but will not determine people's concrete dealings with such animals, for example whether or not they will hunt them for food or whether they will tolerate animals on their land. Primarily livelihood aspects and economic considerations influence such decisions. Rural dwellers cannot be convinced that wildlife is nice to look at and even worth preserving, when this same wildlife threatens their livelihood, eats their crops and even kills family and community members.

Collective proprietorship is a key-element of the CBC approach in the communal lands of Africa. This might not be ideal as compared to private property. Wildlife

has seen gigantic growth on private land in Southern Africa in the last three decades. It evolved from a mere cost, which was better eradicated to a great economic asset, once private ranchers were granted the rights of ownership over game. On communal land the issues are more complex and less favourable. Villages or communities are not clearly defined groups. The members or inhabitants do not necessarily have the same interests, and it is difficult to initiate common action. Communal or cooperative approaches are, however, confined by the land tenure in most areas and societies in question, where private ownership of land does not exist, at least not in a form that would allow other forms of group organisation of CBC.

For the purposes of this paper, all these cooperative concepts, however diverse they might be, are collectively referred to under the term CBC. The well-known CAMPFIRE Programme in Zimbabwe was one of the first practical applications of such strategies and principles. Others to follow were the Southern Luangwa Valley Integrated Resource Development Project (LIRDEP), managed by the late R. Bell and F. Lungu in the eighties, and later ADMAD in Zambia. In Tanzania the Selous Conservation Programme (SCP) began in 1987 and initiated a national community-based wildlife policy and a countrywide programme including a good number of so-called pilot projects. Botswana and Mozambique started with isolated activities in due course. Namibia was the latecomer in 1998. South Africa had nothing of that sort until the first multi-racial elections. Earlier community programmes including co-management of protected areas were started, but no true CBC has been possible due to their specific land tenure situation. The most famous case in South Africa is the joint management of a small part of the northern Kruger National Park, which was returned to the Makulele tribe under restitution policies. Kenya has outreach and co-management projects, but no CBC in the sense of this paper due to the hunting ban that has prevailed since 1977 and a general political aversion to decentralised wildlife management and "consumptive use of wildlife".¹

Many, if not most of these CBC projects became the subject of international assistance programmes in an effort to assist the conservation of biodiversity and at the same time to promote rural development.

From the very beginning these programmes were the subject of an enormous number of studies, research works and evaluations. Many students from developed countries have acquired academic qualifications and started their careers in this way.

¹ An overview of the approaches in different African countries is contained in D. Roe et al.

For obvious reasons most of them only stayed in the areas they covered for a short time. Very few scholars have indeed been part of the processes they wrote about or were intimately involved with them over longer periods of time. The early studies were mostly very enthusiastic but often unrealistic. Some authors claimed that a panacea for African wildlife conservation had been found. They equally condemned anti-poaching activities and policing as outdated, politically incorrect and not up-to-date or even necessary any more. Later studies and sometimes even the same authors became critical or negative and declared the concept as having failed, thereby "throwing the baby out with the bath water". For anybody with a sound knowledge of Africa's development these problems were in no way unexpected, and many of them are of a more general nature and not confined to community wildlife management only. It is quite typical for all the debates that neither the scientists nor the conservationists propagating or criticising the concepts have experienced much exposure to the harsh realities of the African bush.

Such controversies and one-sided judgements are nothing extraordinary. They can be found in many debates about development policies. Wildlife management as such has always been controversially discussed due to the diverse value systems and ideologies of the protagonists and observers. In all means, however, that much of the literature on community-based management is of little relevance to real life situations. And finally: The copious amounts of literature, much of it scientific, or at least trying to use scientific-sounding language, cannot be handled by decision-makers and practitioners who carry the actual responsibility for practical management of wildlife and wild lands.

There is a current trend that the half-life periods of political concepts are getting shorter, like fashion trends replacing one another at ridiculously short intervals. There is a danger that community involvement in wildlife conservation will be regarded as such a fashion and that the new spin-doctors of conservation will try to convince the wildlife managers that the time of this or that concept is over and something "new" has to be invented, or a reversal back to the conventional preservation approaches without people's consultation or involvement. A thorough analysis shows, however, that independent of concrete programmes like CAMPFIRE or ADMADE, which are of course time- and country-related, CBC in general embodies principles, which are not dependent on time and place. Instead they reflect socio-economic principles, which are of universal relevance for broad-based, people-centred and poverty-oriented development.

When Muhammad Yunus, along with the Grameen Bank, received the Nobel Peace Prize in 2006 it was in recognition of his achievement to organise the rural poor into self-help groups through which they managed to improve their economic situation by group action. They would never have achieved the same by trying it alone. It is the principle behind the extraordinary success of all kinds of cooperatives in Europe in the 19th and 20th century. Members of self-help organisations, like the Grameen Bank, have benefited greatly from cooperative action in developing countries too, but two conditions must be fulfilled:

1. The association must serve the economic interests of its members; and
2. The association must be voluntary and not enforced by outside forces.

It is an experience that has been proven time and again in Africa, Asia and Latin America, that development from below can improve the economic and social situation of the poor. However development from above, top-down policies and enforcing development models on people are not effective.

CBC is based wholly on the general principles of self-help action of the poor and on development from below. It must not be forgotten when some groups criticise CBC claiming that it has not achieved its goals. It must always be asked what the alternative would be and whether governmental wildlife management had ever performed better in the past.

"Conservation is still an emotional matter. Towns' people want to decide conservation matters in the rural areas, and Europeans want to direct conservation in Africa."

Der Spiegel (Hamburg) 12/1986



4. A PARADIGM CHANGE: FROM "CONSERVATION AGAINST THE PEOPLE" TO "CONSERVATION BY THE PEOPLE"

When the author studied the history of conservation in Africa and the evolving new concepts in the mid-eighties he tried to systematise the different approaches (Balduz 1987). He termed the conventional creation of protected areas "Conservation Against the People", as this summed up in a nutshell the creation of national parks after people had been moved out of their land. The purpose, namely to conserve nature, was reasonable, but those who decided, those who implemented the actions, and those who applauded were not affected themselves. The costs were borne by poor people, and their human rights were often infringed upon. In most cases, the expropriation of land dates back many years. If there were any legal rights violated at that time, the claims have certainly become invalid by now, although in South Africa some communities have claimed their land back and have won restitution cases. It would be counter-productive to conservation and result in widespread loss of biodiversity (and would undoubtedly be misused), if political pressures and the general demand for political correctness led to a broad based restitution. Interesting enough the displacement of minorities has not come to an end yet, as the case of the San communities in the Central Kalahari Game Reserve in Botswana shows.

Conservation against the people equally describes the introduction of legislation that bars rural people from being able to derive benefits from wildlife on their own land. Normally they were not consulted. If controlled use was continued, e.g. in the form of licensed hunting, this was mostly regulated in such a way that favoured outsiders and discriminated against the local people, for example by requiring the issuance of licenses and the legal possession of a modern firearm.

The approaches, which are commonly called "fences and fences", were clearly a form of conservation without any consultation of the local people and normally worked against their interests. Examples from many parts of the world show that when faced with such situations, people resorted to illegal forms of wildlife use which the Governments were mostly not able to control. Consequently hunting bans, conservation laws and protected areas were put in place, but in reality there was little conservation success on the ground. As this could not escape attention, some enlightened conservationists wanted to win the hearts and minds of the wildlife's neighbours and developed welfare programmes for those residents who suffered from conservation programmes such as the establishment of parks or bans of natural resource use. Governments and international aid programmes financed water reticulation, schools and roads, NGOs provided chicken farms as an alternative

protein to meat poaching and national park administrations gave a percentage of their revenues to bordering communities, mostly in the form of infrastructure. It was a kind of compensation, a subsidy for those who suffered the consequences, or who at least did not benefit from conservation efforts. The paper collectively refers to such community outreach programmes, as they may be called, more than twenty years ago as "Conservation For the People". Communities received voluntary contributions as an incentive to tolerate wildlife or protected areas in their neighbourhood. In such cases communities are not involved in the management of the resource. Instead outsiders who, at their own discretion, let the locals share some indirect benefits or give them some gratuities like financing improved social services manage the resource. It is no secret that town people who do not have to bear the costs of wildlife receive better and a far wider range of services. Development initiatives introduce and upgrade services across the continent irrespective of community attitudes to wildlife, so why should they tolerate wildlife?

Such "Conservation For the People" contributions do not link benefits with conservation efforts. They are not harmful and for the communities it is better than nothing, and there is no reason to withhold them from communities. However, they have not been effective incentives to conserve wildlife.

Practical experience shows that the more people drive their own development schemes the more likely these are to be successful. It applies equally to wildlife management. Enabling the communities to manage the wildlife themselves on their land became the paradigm shift in the eighties. The author termed this concept "Conservation By the People" and was involved in the implementation of such an approach in Tanzania for twenty years. There was some success, but looking back it should be concluded that what was achieved could be more appropriately described as "Conservation With the People" (in accordance with Murphee, 2001). The facilitators and development partners involved people in the development of concepts, provided technical advice in writing up their management plans and assisted them in practicing wildlife management and use. As time went by, and despite government interference and delays, communities played an increasing role in conservation. However, the stage in which it is exclusively the people themselves who manage their wildlife was never reached. It is the stage that has been reached in most countries with CBC. We have to ask whether this is enough and how do we proceed from here.



Is it realistic to expect that “Conservation By the People” will ever be achieved in Africa? Or is it realistic to assume that it is restricted to a few exceptions only? Biodiversity conservation is mostly enforced upon rural people in Europe. More often than not farmers and forest-owners in England or Germany, who have conserved the biodiversity on their land for generations through sustainable use of natural resources, suddenly find themselves deprived of rights by decision of the European Union or their home governments. Often they have not even been consulted. Vociferous urban groups who neither bear personal responsibility for the land nor cover the costs of it are usually much more successful in appealing their environmental perceptions to Parliamentarians and public administrations than the rural dwellers. If this happens in Europe, what should be expected in Africa?

We can, however conclude that co-management and “conservation with the people” is already quite an improvement as compared to the former concepts.

It was inevitable that once the early enthusiasm for the CBC concept had faded, critical and negative contributions on CBC would start to appear in scientific and other literature. This backlash affects the reputation of CBC and compromises the international support the programmes still enjoy. When a developmental concept is faced with the hard facts of reality, the problems and failures become apparent. CBC was a “trendy” topic twenty years ago, and many young scientists flocked to African wild lands in search of this “interesting community experiment”. After a certain amount of positive publications the time became ripe for a new direction and fashion. Managers on the ground are therefore well advised to take the long breath, which is necessary in rural development, and not to get shaken up too easily. It is noteworthy that with a few exceptions most of the critics do not speak from practical experience or from extensive field research. Consequently some tend to misunderstand what CBC is about and their critical analyses often hinge around their misconceptions rather than on what CBC really is.

One type of criticism is decidedly biased: the guiding CBC paradigm is the concept of sustainable use, which includes hunting. There is a strong movement, mainly in the Western world, which disapproves of any kind of wildlife use, and the killing of animals particular. This is based on emotions, beliefs and ideologies and often focuses on the “right” of the individual animal to live, even if it is at the expense of the survival or well-being of the species. The animal rights and anti-hunting lobby has consequently joined the debate in order to discredit sustainable wildlife utilisation schemes under CBC without any real preparedness to discuss the rational merits and/or demerits of the approach. Such animal welfare approaches have nothing to do with conservation or the maintenance of biodiversity and does not warrant further discussion in this paper.

Valid accusations found in the scientific literature and in the factual debates on CBC centre on the following:

1. CBC does not deliver
2. The CBC approach is government and donor driven and top-down
3. CBC fails to stop poaching
4. Central governments have hijacked CBC
5. Communities are not capable of managing wildlife
6. Wildlife conservation and rural development are conflicting targets

Let us deal with these criticisms one by one.

“CBC is a story of high hopes, broken promises and frustration.”

A peasant to the author, 2009

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“What are the Lessons Learnt?”

² This chapter makes use of Siegel in Baldus et al. (2001)

5.1 CBC does not Deliver

It is common argument claims that communities are not interested in taking up CBC because it does not produce enough benefits for them as compared to the disadvantages of wildlife. In many cases this is true. Either the wildlife potential is too small, is not suitable for sustainable use, or the government monopolises the use of the resource and deprives the communities of any benefit. The financial returns from wildlife management for villages therefore depend on the quantity and quality of the wildlife and the management regime, which determines how the benefits accrued are distributed.

Some practical examples from Africa show that incomes for communities can be substantial and that CBC does deliver. In some cases wildlife has a high income potential, be it from photographic tourism, hunting or from other economic uses. A hunting block or a tourist lodge on village land easily represents an annual value of several hundred thousand dollars. In such cases the incentives for governments and bureaucracies not to devolve power and not to share benefits are high. Communities will not gain access if the government is not ready to give up the revenues. There are many cases where community involvement is rejected by bureaucracies, which benefit from the existing conditions and procedures. In such cases CBC has no future.

However, sometimes even small benefits can serve as a sufficient incentive for rural people to conserve nature. Nowhere do villagers ever want to solely rely on wildlife. Peasants everywhere try to diversify their production base to maximize overall income and food production, to stabilize food security and to minimize risks. Wildlife is just one element in a broader range of income opportunities and even relatively small incomes from wildlife play a role for the overall household income. The same is true for example in the author’s home village in Germany, where landowners receive about twenty Euro per year for every hectare of land they own for hunting. Nevertheless this is regarded as “better than nothing”. It is an incentive and it strengthens their bond with the wildlife on their land

In some instances, like in the early phases of the Selous Conservation Programme (SCP), the benefits for the communities were mainly consumptive and came from legal access to bush meat on the basis of a quota. Game meat is highly sought after in Africa’s rural areas and is often the only available animal protein.

Another benefit is jobs. When the local people negotiate contracts with lodges or hunting companies they often include clauses in the contracts, which oblige the operator to preferentially employ locals as staff. This is normally not the case when the land is leased from public agencies. Operators also prefer to employ locals, as this increases their chances for a continuation of leases.

Intrinsic benefits are also important in this respect and should not be overlooked.

Concluding one can say that the success of CBC will indeed be decided by the delivery of benefits. We have good examples, however we have more unsatisfactory examples, and this critique is therefore undoubtedly valid. To overcome obstacles in the field of delivery is certainly a great challenge for the proponents of CBC.

5.2 The CBC Approach is Government and Donor Driven and Top-down

Most CBC programmes have been part of governmental policies and were at some stage supported by international assistance programmes of bilateral and multilateral donors or NGOs. This has led to criticism that they were government and donor driven and not developed from within the communities. Stuart Marks similarly formulates this critique on the basis of his long study.

It is certainly true that the modern CBC schemes are not rooted in African traditions, but the same is true for African government ministries, modern health and school services or for the continent’s football clubs – basically for any “modern” institution. Yet they are considered necessary 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 more dramatic than in Africa. New concepts are not doomed to fail because their origin is not domestic; they fail when they are poorly conceived or they contradict existing social structures, cultures or beliefs.

A multitude of non-community-based conservation concepts have been (or continue with) donor-financed, many actually much higher than any CBC projects have ever been financed. Kenya has received nearly a billion US\$ for wildlife

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preservation in the last 30 years, with relatively little success to show for it. Most preservation-oriented approaches and many national park establishments are based on the expectation of permanent outside subsidies. Some large NGOs create national parks without any hope for these parks ever becoming self-financing. They expect that, if the park is established some outside Governmental donor will be found. This strategy is not without self-interest, as the particular NGO will later get its share of the outside support for looking after the park. The recent "fashion" of establishing Trust Funds is a direct result of this strategy. As the preservationist approach depends mostly on outside finance, the idea is to collect large amounts of capital and to invest it into Trust Funds, which later serve to finance national parks and similar undertakings using the interest. Such funds are governed and managed by representatives of donors, Governments and NGOs, mostly in offshore accounts. Our target groups are not represented and they become entirely the objects of such institutions and their policy. This is the extreme of a donor driven top-down approach in which the rural population loses any sense of self-determination.

The history of many modern so-called "grass roots" actions and movements has been one of failure and the scepticism about CBC is therefore understandable. Many co-operative movements were imposed on communities, particularly in socialist countries and, with a few exceptions, these collapsed due to mismanagement and corruption. However, it has been the author's experience that in many areas there are strong incentives for communities to join CBC schemes, which override scepticism and the fear of being cheated once again by modernisation. The reality that communities queue up to join CBC schemes and even start operations on their own without any support (as was the case around the Selous Game Reserve), simply renders the above argument irrelevant.

Many critics under-estimate CBC projects when they believe these initiatives do not reflect the true needs of the communities involved. This is nothing more than simple paternalism. Uneducated farmers, who may not even know how to read and write, are invariably able to clearly assess which outside offers of support will benefit them and which do not, unless they are purposely misled. In Tanzania, for example, communities have enthusiastically taken up CBC, as they quickly understood the advantages and that it was a win-win situation for them.

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 target groups have developed their own workable adaptations of the basic concept.

CBC will fail if adequate legislation and policies do not exist or support from the top is weak. There are issues to be addressed "at the top" for successful CBC, and this is an area where donor intervention can be effective. This should, however, not be confused with a top-down approach. If this happens without a matching bottom-up support, then failure is inevitable. Experience shows that top-down approaches have little chance for long-term success. But this is the case with any development project, not only with CBC.

5.3 CBC Fails to Stop Poaching

Some observers have expected that CBC will replace the former law enforcement orientated approach. Some idealists even argued that no further anti-poaching would be necessary once communities are able to reap benefits from wildlife and look after the resource themselves. Critics have used this fact to disapprove of the whole CBC approach and have argued that it has failed, because poaching has continued. Experience however, shows that for a number of reasons this expectation has been naïve.

An analysis of the different successful CBC approaches all over Africa shows that nowhere has CBC replaced law enforcement. It is an unrealistic misconception that in real life anti-poaching activities in the field could be abolished, as soon as communities benefit from wildlife and responsibly manage their resource. Normally the poaching from within the community is indeed reduced, but a number of criminal elements will always remain. Unfortunately the individual benefits from poaching are always higher than the share the individual may get from communal benefits. In any case, the benefits a community might enjoy do not influence poachers from outside. Therefore wildlife legislation has to prevail, and laissez faire management cannot be allowed.

Under well-managed CBC, law enforcement through anti-poaching is actually strengthened, as the communities take on these responsibilities themselves and employ village scouts for anti-poaching operations. Districts in Tanzania for instance, where CBC is introduced, now rely heavily on such village scouts for anti-poaching, because in the course of the decentralisation process, with few exceptions, their own Government scout force has been cut to virtually zero.

In most cases the communal policing of wildlife areas is far more effective than the efforts by Governments. There is empirical evidence from all CBC areas that poaching was reduced as compared to the situation prior to its introduction. The hypothesis that people will tend to look after the resource better once they derive at least some benefits is verified. The real benefit of successful CBC from a conservationist point of view is an expansion of the wild lands, and a resulting increase in wildlife populations. The core areas typically remain as protected areas under the management of conservation agencies where the requirements for law enforcement operations remain regardless of CBC, however these operations are greatly facilitated by the greater spread of wildlife and the increased anti-poaching capability from the numerous surrounding village scouts. The example from Namibia that is included as an annex provides ample evidence of this effect.

5.4 Central Governments have Hijacked CBC

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

This is certainly a valid argument. The Tanzanian case study verifies this argument, and many studies have shown that it is frequently valid. Such situations are the direct result of corruption and/or poor governance, and the communities are the victims of such situations. If a government is not willing to hand over responsibilities to lower levels, CBC cannot work. One has, however, to look at every particular case. In Tanzania central Government policies clearly expressed the intention to devolve power to the communities. As everywhere the government is not monolithic. There are officials at the middle/higher level of the central government who fear the loss of

authority, influence and also income opportunities if responsibilities are transferred to districts and if communities are empowered to make their own decisions. The top decision-makers in Tanzania were, however, pro-CBC. The example shows that bureaucracies are not identical with Governments and, under certain circumstances, have the power to reinterpret and finally corrupt and misuse a Government policy.

Under an ideal regime of good governance, communities would be empowered to manage their wildlife in a manner that best suits them. They would take the full benefit, but are taxed under the taxation laws of their country, as would be the case with any business venture.

5.5 Communities are not Capable of Managing Wildlife

It is argued that CBC is alien to communities. It is not based on age-old traditions and some aspects like quota setting or accounting are beyond the competence of rural folk. However, the administration of CBC on village level, which involves collection of funds, accounting and budgeting, is not much different from, for instance, the administration of local water schemes, which have now been in existence in many places for decades. The view that the administration of CBC is too demanding for the community members is a misconception of rural communities' abilities. On the contrary, experiences show that some villages are actually quite exceptional managers. An important aspect and also a significant cost factor of all CBC schemes is training. Tanzania, for example, has therefore established a training institution for village scouts and village functionaries in Likuyu-Sekamaganga. Curricula comprise the basic knowledge and the skills necessary to manage wildlife on village land. However, without guidance and on the job training from the wildlife authorities most communities would struggle to carry out their CBC activities properly. A backup system 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 and provide one of the few legal mechanisms that encourage the transfer of this knowledge from the elders to the youth and in this way enhance the development of culture. It is not by accident that in most communities among the first scouts selected for training are

the local traditional hunters. People who are familiar with their surroundings can carry out antipoaching, hunting and basic ecological monitoring, and in most cases are more effective than government scouts or foreign scientists. During research carried out on elephant migration within the Selous-Niassa Wildlife Corridor (in preparation) the interpretation of traditional knowledge of elephant migration routes was combined with results of the latest satellite-based technology for monitoring elephant movements. In this case the local knowledge was detailed and exact and complemented the scientific investigations well.

Using local know-how leads to an improved management of Wildlife Management Areas (WMA). Surveillance of these areas is more or less continuous and the performance of the “on site enforcers” with local knowledge is by and large superior to scout forces alien to the area. On the other hand, traditional hunting methods (hunting with bow and arrow, poisoned and not poisoned), have been found not to be effective under modern conditions. Other traditional methods like snaring and pitfalls are non-selective, wasteful and regarded as cruel and therefore not acceptable. Poaching is nowadays the accepted way of hunting and local skills to use it effectively exists. After all, the traditional hunter used it as a poacher in the past! At the same time the rifle is an anti-poaching tool, which village scout forces have to possess anyway. Setting sustainable hunting quotas is a specialist task, unless the particular species is locally abundant. If animal counts are necessary, they are usually carried out with assistance from specialist agencies. Communities need assistance in quota setting, but they themselves can collect the required ecological monitoring data for it, and with time are capable of acquiring the necessary skills.

In reality it is difficult to differentiate between traditional and local knowledge. The latter might be acquired only recently. How old must knowledge be in order to be considered traditional? For practical purposes it is not necessary to differentiate between such types of knowledge. What counts is that local individuals have the opportunity to apply their own knowledge and those skills, which they regard as relevant themselves.

There is an argument that villagers would expect development that may not be conducive to conservation. Economic development would damage natural resources whereas the protection of nature would hinder development. By conserving wildlife under CBC, villagers would miss better economic options to use their land, and as a result development is hindered. On the other hand, they argue that if CBC is successful, this would attract people from outside. The immigrants would need additional land, thereby reducing the available land for wildlife management. In a nutshell, wildlife conservation and rural development are conflicting targets.

In principle conservation is not considered to be detrimental to development. On the contrary, “Agenda 21”, the United Nations policy document for sustainable development in the 21st century, is based on the view that in the long run development will suffer if natural resources are depleted and destroyed. The existence of wildlife is an indicator for a relatively unspoiled environment, which has retained its function for providing the services of climate, water and agriculture. Conservation and maintenance of biological diversity, which are a consequence of successful CBC, can thus be regarded as positive for development.

Wildlife competes with other types of land use. Rough CBC wildlife is given a value and for the first time it becomes competitive, and this might reduce alternative and ecologically destructive forms of land use.

CBC converts wildlife into an economic resource and thereby uses conservation as an instrument for economic development. Wildlife can be an extremely valuable resource. CBC is one of the few, if not the only option that can use that resource for the economic development of rural communities. CBC is the tool to turn the old conflict between wildlife and rural livelihoods into a positive correlation. Sustainable wildlife use is thereby not in conflict with rural development. The opposite is the case. It can be an instrument of poverty reduction in rural areas.

There are observations that successful wildlife use and CBC attract immigration by other poor people. This can indeed endanger the conservation approach and reduce the benefits per head. Some countries have traditional land tenure systems that control immigration. In other cases this is indeed a challenge one has to manage and master.



5.7 Résumé

As far as the critics of CBC are concerned we have a number of empirical answers that are summarised in the following points:

1. CBC is no substitute for the management of protected areas. It is complementary. The Serengeti National Park will not be turned into a Wildlife Management Area of the surrounding communities. However, in many unprotected areas that would otherwise be turned into maize fields and wheat farms, natural resources will receive a higher degree of protection.
2. CBC policy may be Government driven, but the community response is spectacular. In many cases villages have taken the initiative into their own hands, not waiting for the green light from a capital and authorities.
3. Anti-poaching by committed and trained village game scouts invariably works better than if conducted by official law enforcement agencies. CBC is not there to replace it. Again, it complements. Anti-poaching by the government is there to stay.
4. CBC in many cases will not provide a tremendous addition to household income, but in practical life the small things also count. Venison 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. An additional incentive is land security. Villages often do not have certified borders. CBC gives them implicitly the right over their own resources.
5. Rural people still have traditional knowledge to manage wildlife, and they are keen and able to learn modern techniques. Some expert advice is also necessary, and there is scope for the development of a private wildlife consultancy sector capable of providing the necessary support.
6. Sustainability is a challenge, but this does not only relate to villages as decision-makers. There is a lot of illegal wildlife use anyway, and to legalise it makes it more controllable and contributes to keeping take-off levels sustainable.

7. At some stage the governments might get scared by their own courage to have initiated such a major process of deregulation. There may be short-term losses of power and finance for the central governments, but in the long run all sides will benefit. However, the bureaucracy might realise that its members will lose influence and legal as well as illegal incomes. They are the greatest threat for people-oriented and poverty-oriented CBC.

8. Wildlife conservation and rural development are not conflicting targets. Game is an important economic resource in many rural areas. It can be used sustainably and can be turned into a powerful instrument of eco-friendly rural development.

“Common goods tend to be over-exploited. It is a prerequisite for sustainable wildlife utilisation to restrict its use. Such an approach has to contain the following elements:

- community manages and utilises wildlife in its own long term interest;
- annual offtake is limited to sustainable production level;
- internal rules limit the individual access to the resource;
- in turn: protected ownership rights or long-term user rights are granted to local communities.”

Rolf D. Baldus, 1987



Professor Elinor Ostrom received the 2009 Nobel Prize in Economic Sciences for her analysis of economic governance, in particular the commons. She criticised the conventional policy analysis as applied to many natural resources, and presented empirical examples of successful and unsuccessful use of such resources. She developed tools to understand self-governing institutions for regulating many different common pool resources. “The issues of how best to govern natural resources used by many individuals in common are no more settled in the academia than in the world of politics.”³ Her empirical basis was communal tenures, fisheries, irrigation schemes and groundwater-use. Wildlife is just another example of the conflicts, which can arise when different people and groups compete for the use of such a common pool resource. Ostrom’s conclusions therefore apply fully to our topic, although she did not consider wildlife in her analysis.

Ostrom accepts the “tragedy of the commons” dilemma. Like us she rejects the frequent argument that only state or private ownership/management of such resources are a solution. On the contrary, she shows that both have failed on many occasions. She observes that communities have instead relied on institutions resembling neither the state nor the market to successfully govern resource systems over long periods of time. People have organised themselves voluntarily to manage common properties to avoid unsustainable exploitation. Such institutions possess the characteristics of “self-help organisations” and can consequently be termed accordingly, as the author has shown earlier⁴. Ostrom hopes that her enquiry “will contribute to the development of an empirically supported theory of self-organising and self-governing forms of collective action”. She goes on to complement and further develop the theory on self-help organisations which have a long history in German economic sciences⁶.

Interestingly enough, the 2006 Nobel Prize for Muhammad Yunus for his effort to create bottom-up economic and social development through the Grameen banking system, another type of self help organisation, and the 2009 Economic Nobel Prize are closely connected. The similarities to CBC are remarkable – these are self-help organisations set up to manage wildlife, which is a common pool resource, sustainably achieved by group action. These efforts can proudly claim that their underlying principles have twice received recent Nobel Prize blessings.

Environmental economist Ostrom has shown that if users work together, community assets can be effectively used locally in self-administration. People cooperate if they

³ Ostrom, p.1.
⁴ Baldus (2000), p. 505
⁵ Ostrom, p. 25.
⁶ cf. Dülfer and Baldus (1976)

realise that unity makes them strong and is for their benefit. In this way sustainability in the use of natural resources is achievable. Overexploitation is not a natural law, but can be prevented by reasonable regulations and stipulated positive as well as negative sanctions. A crucial factor is that rural communities make their own decisions, and are not dominated by elites or bureaucracy. If local small-scale farmers receive ownership and user rights over natural resources, this creates economical incentives for their conservation. The use becomes sustainable. Wild animals remain common property, but through the self-interest of the users and agreements between them, the open access becomes restricted.

Ostrom identified normative design principles as preconditions for stable arrangements to cooperatively manage common property resources:

- clearly defined boundaries
- congruence between appropriation and provision rules and local conditions
- collective-choice arrangements allowing democratic participation of the members of the groups
- effective monitoring by people who are either members of the group or are accountable to members
- sanctions against members who break the rules
- appropriate conflict resolution mechanisms
- in the case of larger and complex systems: communal enterprises at local level should cooperate and coordinate with one-another to build appropriate vertical structures

These design principles can serve as useful norms for the organisation of community-based conservation and are further considered in Chapter 8.

“Conservation of nature is not only an ethical responsibility. Often it is economically advantageous. ... Biological diversity cannot be maintained using orders and bans alone. Instead we have to apply additional economic instruments which ensure that conservation becomes an integrated component in the pursuit of economic objectives. This requires that clear economic incentives for the conservation of nature must be created. In addition we have to increasingly rely on local experience and know-how as this will increase the effectiveness and efficiency of our actions.”

*Memorandum “Economics for Nature Conservation” by German scientists, August 2009
 (translated by the author)*

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7. CONCLUSIONS FROM AFRICAN EXPERIENCES AND FOUR CASE STUDIES

7.1 A Mixed Picture

After three decades of CBC the result is a mixed picture. We have some highly successful cases, notably in Namibia. We have cases like CAMPFIRE, which were rather successful at some stage but were later badly damaged by general political developments. Nevertheless the resilience that CAMPFIRE has shown under extremely unfavourable political and economic conditions in Zimbabwe is remarkable. We have the example of Tanzania, which – due to high inputs by the Government and donors - has achieved a lot, such as an excellent legal framework, and established CBC structures on the ground, but which is still missing the most important elements: namely devolution of power and benefit sharing. We have other countries that have, for political and other reasons, never adopted a CBC policy and have in the last decades lost most of their wildlife. A continuation of the old fences-and-fences concept has been no more successful in recent decades than it was before.

A similar thread emerges in all the areas where CBC was without success: It was never the communities that stalled or delayed the CBC processes. Instead they were quick to recognise their chances, to take up the new ideas and to engage themselves. They clearly saw that the new concepts brought more advantages than risks. Despite their justified scepticism for Government and donor concepts, they took up CBC with enthusiasm. In many places people have even started their own CBC schemes without waiting for the Government or a donor to come on board. Some of these cases became particularly successful or could even spearhead major conservation developments like the Wildlife Corridor between Selous and Niassa game reserves.

In many places wildlife is still an important element of rural food-supply, livelihood and culture. It has a great economic potential but at the same time is a major problem due to human-wildlife conflict. The enforced alienation from wildlife does not lie so far back that people would not remember how they or their ancestors once managed the resource. They are also aware that their current (illegal) styles of use are no longer sustainable.

CBC has indeed become an accepted form of wildlife management in many African countries and in the international debate. Despite the critique of some of the detail it is still widely seen, in principle, as an overall positive development. CBC fully satisfies the requirements of the Convention of Biological Diversity. Within three decades CBC has become mainstream conservation. The mix of rural development,

biodiversity conservation and empowerment of poor rural people is in line with modern international political and development philosophies. The Nobel Prize for Professor Ostrom’s work on the commons is just the “cherry on the cake”. The new paradigm is now deeply rooted in conservation policies. The principle has also been adopted for other natural resources, for example in the management of forests. We know of a few great examples where game that was on the verge of extinction was brought back by laying its management and use into the hands of the local people. The Markhor sheep in North-western Pakistan is an outstanding example.

7.2 The Crucial Role of Governance

Governance is the major factor which decides whether a CBC programme can take off and generate benefits. In most cases where CBC was actively suppressed by Government authorities, we find a Bad Governance situation. The Government and its personnel at the different administrative levels do not want to share revenues. Bad Governance is simply not compatible with the devolution of power to communities.

The role of governance is nicely illustrated with a comparison of the two examples of Namibia and Tanzania. In Namibia there was originally little game on communal land, as it had been overused and mismanaged. Consequently there was little legal wildlife use in the form of tourism or trophy hunting. Only by making the villagers the wardens, and some external support for financing the translocation of breeding stocks, did it become possible for game numbers to increase sufficiently that they could be used for tourism and hunting. The revenues were significant to the communities, but not substantial enough for the state to develop too much interest. The Government thus allowed the communities to continue to generate their earnings from conservation. This boosted morale greatly. Transparent and efficient allocation mechanisms were developed with the help of some good advice from NGOs, for example allocation of blocks by public tender. This ensured that revenues could be maximised on the basis of competitive bidding and other market-based mechanisms.

The case of Tanzania was quite different. A strong and growing hunting industry existed there and was heavily reliant on the hunting of wildlife on village land. All revenues went to central authorities, except the profits generated by the private sector. There were certain distribution mechanisms to the districts, but this was a small share



of the proceeds from hunting and never reached communities. Tourist hunting was a considerable money earner for the central budget. However, there is wide agreement in Tanzania nowadays, and this includes both the Ministry for Natural Resources and Tourism and the Parliament, that hunting was not efficiently organised. The Wildlife Department has therefore announced that procedures will be reformed. In the past and for over twenty years the Director of Wildlife at his own discretion allocated all hunting blocks to hunting operators. These were neither objective nor transparent allocation procedures. The annual fixed fee per hunting block was US\$ 7,500 per year (recently increased). Based on the prices for comparable blocks in other African countries, one can assume that the same blocks would have cost up to several hundred thousand US\$ as a result of competitive bidding. This might explain why neither the responsible civil servants nor the hunting industry were interested to hand over hunting blocks on village land to the communities.

Neither the Tanzanian Wildlife Department nor the leading people in the hunting industry wanted to change this situation. The whole system would have been greatly disturbed if the communities would have appeared as a new player. Verbally the administration supported the development of CBC. Over the years a respective Wildlife Policy and a new Wildlife Act were worked out, detailed regulations formulated and thus a sophisticated framework for CBC came into being. It had only one major shortcoming: It was never allowed to operate. The alliance between the Ministry for Natural Resources and its Wildlife Division and the hunters represented through the Tanzania Hunting Operators Association (TAHOA) bears the greatest responsibility to delay the CBC process. It prevented devolution of power and sharing of revenues, although the rural communities were eager to start CBC. Nevertheless the legal and administrative preconditions for CBC have been created, and it would in principle be possible to start effective communal game management at any time.

Over the years NGO and donor countries, in particular the WWF, Germany and the United States financed the development of this framework in Tanzania with development assistance in the range of over US\$ 10 million. From the bureaucracy's perspective, this had the pleasant side effect that its leading members had an additional and significant source of income by being part of these projects. A multitude of often unnecessary studies, meetings, public hearings etc. secured a steady flow of sitting allowances, per diems, study tours, fees and other windfall incomes. There was not the slightest incentive for the bureaucracy to bring the preparatory process for CBC to an end.

Nelson and Agrawal⁷ have related the incentives and disincentives to devolve authority for wildlife with different features in an admittedly simplified table. It shows that low values of wildlife, high transparency of use and acceptable Governance lead to high incentives to devolve and consequently high levels of devolution achieved, like in the case of Namibia. The opposite case, namely Tanzania, combines high values with low transparency and low overall Governance. This creates a high incentive to keep the centralised system and consequently leads to a low level of devolution.

This brings to mind other natural resources, like oil or diamonds, which are seen by many as more of a curse than a benefit, a kind of paradox of plenty. However, where there is little to grab, the greed of those in power is restrained. This is obvious but does not help us further.

Table 1: Key Variables Influencing Central Actors' Incentives and Disincentives to Devolve Authority for Wildlife to Local Communities, and Actual Devolution Achieved

Country	Value of Centralized Commercial Utilization of Wildlife on Community Lands	Transparency of Procedures for Allocation of Wildlife Use (Hunting) Concessions	Overall Governance Transparency	Disincentives for Central Authorities to Devolve Authority over Wildlife	Level of Devolution Carried Out
Namibia	Low	High	Medium	Low	High
Botswana	Low	High	High	Low	Medium
Zimbabwe	Low	High	Low	Low	Medium
Zambia	High	Low	Low	High	Low
Mozambique	Medium	Medium	Low	Medium	Low
Tanzania	High	Low	Low	High	Low
Kenya	Low	n/a	Low	Low	Low

7.3 Choosing the Best Form of Wildlife Use

Whether we like it or not, the hunting industry plays a crucial role in all CBC schemes. Communal lands tend to be less attractive as compared to landscapes that were selected for national parks. Consequently they are, in most cases, less suited for photographic tourism. Usually only a limited variety of wildlife species are present and at low densities that render such areas unattractive to sufficient numbers of tourists required to justify a viable tourism operation. For hunting this is all irrelevant. In Zimbabwe it was primarily the elephant that occurred in sufficient numbers on communal lands

⁷ Table 1 is from Nelson and Agrawal, p. 576.

and could be hunted. It was also a high-revenue earner, and CAMPFIRE therefore relied mainly on elephant hunting. Experience shows that tourist hunting has the greatest revenue potential of all available options in CBC programmes. The hunting of meat for subsistence can add an additional benefit, as meat is scarce in rural areas and regarded as a luxury. Commercial meat hunting schemes have however, never been able to generate enough revenue to cover costs and provide sufficient income for the communities, although such schemes have taken a heavy toll from the wildlife populations. Whether photographic tourism competes favourably against tourist hunting depends on the individual circumstances and must be subjected to an economic assessment in every case. It is a general finding that the specific organisation of CBC, types of use etc., are dependent upon the prevailing micro-conditions. Nobody is in a better place to critically assess the respective opportunities of the situation than the concerned communities themselves. The Government is certainly not well placed to decide such matters.

7.4 Governance at Village Level

The crucial importance of Governance and corruption in greater society and in the wildlife administration has been pointed out. Where corruption exists, such patterns tend to be copied at lower levels of society, for example in the village associations created to manage the wildlife. In such cases individuals who have already dominated and misused other village organisations with financial implications, like village governments, infrastructure projects, cooperatives, water schemes etc., try to take over leading functions, and frequently they succeed. The less democratic controls and requirements for transparency are put in place, the more these individuals will succeed in appropriating a major share of revenues. This can take many illegal forms, i.e. fraud, but clever individuals can even legally empty the common bank account by high sitting allowances, per diems for "duty travels", as frequently has happened in Community-based Organisations (CBO). A lack of participation by members in annual meetings or low transparency in financial issues favours such developments. This aggravates existing stratification in rural society and some observers have noted this as a consequence of successful CBC. If bad Governance at local level is not prevented, then the obvious lack of benefits for the community will inhibit the successful progress of communal action. Transparency, accountability and effective systems of control are of critical importance not only at national, but also at village level and not only for CBC, but for all development schemes.

7.5 Intrinsic Effects of CBC

There are intrinsic CBC effects, apart from the monetary and material ones, which are frequently overlooked, but can be of great and sometimes decisive importance for the members of Community-based Organisations. Foremost amongst them is the self-determination as far as the dealings with wildlife and all connected rights are concerned. Old rights are reinstated and this leads to great satisfaction. As mentioned before, in many rural areas wildlife is still of great cultural and political importance and the end of alienation from this resource is a great step forward.

A second point that has to be mentioned in this respect is the takeover of duties like wildlife management. The conventional anti-poaching by outside agencies like Government game scouts always bears resemblance to the activities of an occupational army. All villagers are put under general supervision. Transgression of legal powers by scouts, even abuse and solicitation of bribes are common. Under CBC it is the members themselves who have an interest to reduce poaching. Experience shows that they or their authorised representatives are in a much better position to supervise the game areas as compared to outside Government employees. In most



cases these tasks are assigned to selected members of the communities. They act as appointed "village game scouts". Their costs and small allowances are covered from revenues of the Wildlife Management Area, but their real motivation is the pride and respect that they acquire within their own society. Apart from devolving just another function to the community, this is extremely valuable from a conservation point of view, as village game scouts are the first successful method in Africa to bring the widespread meat and trophy poaching under control. Such systems of village game scouts in Namibia and around the Selous Game Reserve in Tanzania have been extremely successful.

Last but not least, the defence of life and property by these village game scouts is a service to the community, which cannot be underestimated. Wildlife-human conflict is a major part of life in all African wildlife areas. Dangerous big game kills and injures people. We have estimated that in Tanzania around 100 people get killed every year. We have researched the case of one particular man-eating lion that was involved in 34 killings in 2004. Elephants, buffalo, bushpigs and other game eat and destroy people's crops, and in subsistence societies this can result in hunger for the affected households. For financial and practical reasons compensation is not paid anywhere, if one leaves nominal small symbolic payments unconsidered. The Government scout force is unable to help for structural, financial and professional reasons. Often scouts are just not available. In such cases people turn to self-help. More often than not they resort to poison, that is extremely detrimental for wildlife, as many non-target animals get killed in an unselective way. Crop protection and predator control is unavoidable. From a conservationist point of view, it is preferable that the communities themselves are allowed to practise problem animal control after receiving legal counselling and, if necessary, additional technical training and equipment. CBC has the potential to reduce the common conflict between people and wildlife for the mutual benefit of both the communities and conservation.

Any democratic process or institution has to be organised and run from the bottom-up. This is the norm, the ideal to strive for. It is very difficult, if not impossible, to organise participation, power sharing, self-government or self-help from above. After 40 years of efforts to promote the development of third world countries all serious professionals, and increasingly African experts themselves, agree that it is not possible to initiate people centred processes and to have people in charge of their own destiny if top-down structures prevail and if outsiders decide for the people instead of the people themselves.

Examples from basically all African countries prove, however, that reality mostly looks different. Social change and community development are frequently initiated from above in top-down processes, be it by Governments, NGO or donors. One of Africa's great failures has been that most efforts to improve the situation of the rural poor have been characterised by such top-down action. This applies even to strategies, which are explicitly aimed at the opposite. Participatory conservation initiatives that are imposed from above will in most cases not lead to genuine change, but remain artificial. In authoritarian regimes there is also the danger that in order to follow the mainstream thinking of donors and to obtain their finance, major programmes of community stewardship and decentralisation are conducted with the rhetoric of natural resource benefit sharing with communities, but in reality this is nothing but mere window-dressing.

On the other hand it is rare that poor communities have the initiative to organise themselves for political, economic or social action to improve their standard of living. Normally it needs outside agents and moderators who supply them with new ideas, who mobilise them to help themselves, who train them in the techniques necessary to run their own affairs and who defend them against the forces of persistence from above. "Help for self-help" is not only a slogan, but experience shows that it is a necessity, as difficult as it may be in reality. Without sufficient capacity building supporting community processes can rarely be initiated or sustained.

This paper makes no attempt to explain how capacity building and bottom-up processes can be professionally organised or finding the balance of providing enough motivation, advice and support, while avoiding paternalism, patronage and spoon-feeding, which kill the self-help spirit one wishes to instil. There are successful examples to learn from, and sufficient handbooks and training courses on

"One of the absolutely key, most important variables as to whether or not a forest survives and continues is whether local people monitor each other and its use. Not officials. Locals."

Prof. Elinor Ostrom, 2009 (Reuters News)

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* See for example IIED or <http://www.policy-power-tools.org/related/CAMPFIRE.html>

order to acquire these techniques. What is needed on the side of the promoters, be they Governmental or private, is the willingness to let the community loose at the right time and not to hold on to power or protect their clientele once it is no longer necessary.

Time is a major issue. Behavioural change does not come about quickly and to motivate people for change requires patience and stamina. But again the right balance between leaving too early and staying too long has to be found by those facilitating the processes. "Process" is actually a key word in this respect. Facilitators should not be too eager to achieve unreasonably quick results. It is more important that they get the process going in which the target groups learn to take decisions themselves. Bottom-up developments require more process orientation than result-orientation, and support systems have to be adaptive, as unpredictable change is the normality due to the target group taking decisions themselves in a democratic manner.

8.2 Facilitate Revenues and Benefits for the Communities!

The main incentive for the communities to take over the management of wildlife on their land is the expectation of revenues and benefits. Wildlife is, as they know, a potentially valuable resource. It can be the most valuable resource, which is available to them. In the past such revenues were not generated or they did not reach them. Once communities actually receive tangible benefits of the wildlife resource, this immediately becomes the strongest motivation for them to ensure their CBC schemes succeed. Delivery of benefits saves a lot of education and mobilisation, and particularly if this can be achieved from the start of such schemes.

The argument that low wildlife numbers, such as at the start of most CBC schemes, are unable to sustain low levels of take through selective hunting is frequently supported by those who either disapprove of hunting or have little practical experience with managing wildlife. Typically they will argue for further data that requires years of counting animals and research on possible take levels. Sustainable take levels are known for all wildlife species and there are precautionary techniques that avoid overharvesting. If the money thus earned serves to reduce poaching, the net effect is positive. The number of animals not poached is higher than the number hunted. Such early income, as little as it may be, serves as an

important incentive to protect and allow wildlife populations to grow. On the other hand, the delayed action based on the need for monitoring and research results in frustration, distrust and increased uncontrolled wildlife use, which is contrary to the interests of the community and conservation, a lose-lose situation.

In exceptional cases it is, however, not possible to start revenue earning at the very beginning if, for example, game populations have indeed been virtually wiped out. In such cases a proper explanation to members is necessary. Experiences show that communities are quite capable and prepared to understand such an obstacle and are willing to wait for the benefits to build up, if this is properly communicated to them.

All revenues should go directly to the communities. Revenue sharing with the different Government levels is mostly counterproductive, leads to all kind of abuses and undermines the economic potential of wildlife. This is not logical. If people grow maize on their land or keep goats and cattle they do not have to share their income with the Government. If they replace agriculture with wildlife or decide that they will not replace the existing wildlife with agriculture, why should they then share with the Government? Benefit sharing between government and communities is actually a heavy taxation for wildlife-based land-use. It makes wildlife less profitable than alternative ways of land-use and therefore secures that wildlife enterprises are not introduced or are not successful.

In the African reality it is also not advisable that local governmental self-administrations such as District Councils become the recipients of the wildlife revenues. Instead the income must go directly to the CBO, which the communities have created for this purpose.

In order to maximize revenues the sale of wildlife should be done at market prices. This includes the sale of meat to members of the group. Sale is preferable as compared to the distribution of free meat.

Apart from monetary benefits other incentives must be adequately incorporated. Intrinsic cultural and political WMA effects are to be strengthened. Suitable systems of crop protection and anti-poaching by elected and trained game scouts are to be organised. Scouts are to be reimbursed as part of WMA management costs.

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□ e CBO is, as the name says, a membership organisation and it needs appropriate rules and regulations, which have to be established by the community on the basis of existing legislation. □ is usually not possible without outside technical advice. □ e CBO fulfills all definitions of a self-help organisation with an affiliated economic enterprise. It has a defined membership, an accepted set of rules and regulations for operating and managing the resource in a specified geographical area (WMA). It also has the user rights for the wildlife resource, and for the management and use of this resource it must create a kind of enterprise.

All these activities require specific knowledge and operating techniques, which are mostly not part of traditional knowledge. □ erefore, technical training of members and the elected holders of functions in the organisation must be provided. Intensive capacity building is a priority. Everything necessary can be learned and acquired, even by community members with relatively little formal education. A specific training institution or a CBC branch in an existing wildlife training institution best serves the purposes of training all levels (members, committee members, executives).

However, some types of wildlife use, like the operation of a lodge or a trophy hunting enterprise, needs specialised and rather advanced expertise. Villagers can normally not provide the services required by international clientele. In such cases the operation is better leased out to the private sector and communities need only manage and control the lease arrangement. In such cases outside advisory services help to ensure that the CBO is treated fairly and is not betrayed by an operator.

8.4 Keep it Simple!

CBC needs procedures that are agreed by members, in order to maintain a certain order of business and administration and to avoid some members from manipulating affairs for their own benefit. Governments also have the right to lay down rules and regulations to safeguard the rule of the law.

Nevertheless, there is no need to make these rules overly complex and complicated. Bureaucracies everywhere have this tendency in order to keep themselves employed and to maintain their powers of control. In many CBC schemes, unnecessary complexity has been used to delay the processes of devolution of power.

do it best, the private sector. □ e less the government interferes in the management of CBC the better.

How much the government gets involved in training and capacity building depends on the specific situation of the countries concerned. In many cases this too can be best achieved by the private sector.

Local initiatives, in fact, need the regulatory functions of the state less than the bureaucracy believes.

8.7 Devolve Power to the Lowest Level!

Local democracy works best if power is devolved to the lowest possible unit. Small is beautiful! Participatory democracy is often difficult to understand for villagers with little experience in modern types of representative democracy, which becomes a problem with large groups. CBOs must be as homogeneous as possible and small group size also allows greater homogeneity and social cohesion. Sometimes it may be advisable to divide into subunits.

For practical reasons, however, it is sometimes necessary to either have larger groups or to connect groups into cooperating networks. □ is is one of Ostrom's design principles, when she speaks of nested enterprises. □ e establishment of secondary structures may be useful in such situations, for example, several villages could be organised into one CBO. Special care must be taken in such cases to ensure that the spirit of self-determination does not get lost, but it is the commitment of individuals within the community that will determine whether such structures function effectively. However, it is mostly economics which dictate the development to larger or vertically structured units, and there is a need to maintain transparency and democratic decision-making under such circumstances.

8.8 Facilitate Governance!

Bad governance at central level with its resulting mismanagement of wildlife industries and administration is, as we have seen, a critical factor and a major stumbling block for CBC, but also very difficult for CBC actors to influence. NGOs and donors can try to exert influence and pressure on behalf of their target

□ e KISS principle, namely "Keep it Simple and Stupid" applies here fully, all the more when the groups in question do not have the ability to manage complicated processes. □ ere is no proof that KISS does not work in CBC. However, there is plenty of proof that complex sets of rules have not worked.

8.5 Develop at Grassroots, but Care for a Favourable Political Environment!

□ e centre of gravity in CBC is the primary self-help group and their WMA. In most cases, this is where the success or failure is determined. Experience shows that small groups function better than large groups, which tend to be complex and impersonal. It is therefore justified that all efforts should concentrate on this primary level. It is not advisable to invest into the development of national structures, if the build up of the primary level is neglected.

On the other hand CBC at village level can only function in the long run if a suitable political, legal and administrative framework exists. □ is consists of:
 – a positive political climate, for example the inclusion of CBC in national poverty reduction strategies,
 – a suitable national strategy, for instance a wildlife policy,
 – and most importantly the necessary legal framework.

For some time CBC can function in the form of spontaneous village activities or specially created small projects, however in the long run a favourable political and legal environment is indispensable. Policy and legislation must reflect the real needs of CBC. Donors are therefore well advised to include efforts to develop or strengthen this framework into their programmes. Nevertheless, the focus must remain the community. □ is is where the cookie crumbles!

8.6 Minimize State Intervention!

□ ere are different philosophical and political concepts about the role of governments in the development process in Africa. Successful conservation is certainly not possible in the long run without the government playing a role. But a government should concentrate on the functions that it does best and leave the rest to the private sector and rural communities. Governments should set a regulatory framework and ensure that it is adhered to. It should leave all business type operations to those who

groups, but as practical experience has shown, this is seldom successful. From the viewpoint of the communities the actual governance status in their country has to be accepted as a given factor, which will determine or influence the success of their efforts. Sincerity to allow CBC by those in power is a precondition of success. It is bad luck for CBC if governance leaves a lot to be desired.

On the contrary, governance at the primary CBC level, which normally reflects conditions in the wider society, is something that can be influenced. Appeals to behave responsibly and anti-corruption campaigns do not help. It is more effective to facilitate governance than trying to propagate it. Outside interventions for installing technical procedures that lead to more transparency, increased information transfer to members and generally more democracy at grassroots can be successful. Meetings must be held, bookkeeping results and financial statements must be presented and interpreted for members, and decisions must be available for everybody that is interested. Elected representatives must report back to membership in institutionalised ways, communication between committees and between committees and members must be maintained, etc. □ e banking system has to be used for payments as much as possible. Reports should be cheaply printed and circulated, as there are always some literate people around. Generally the four-eye principle must be applied. Reimbursement of costs and bonuses for elected representatives has to be controlled.

□ e groups must introduce their own simple monitoring systems, and if operational rules are violated then the perpetrators must be punished. □ is requires that sanctions for such cases must be agreed in advance and they must be applied, irrespective of the status of those found guilty. □ is is difficult to enforce in traditional African society, but if left alone participants have their own mechanisms to apply adequate penalties and conflict resolution mechanisms. Self-governing self-help organisations have shown that they are relatively robust, as long as external politics and interferences can be avoided.

A number of tool kits, handbooks and methodologies to improve accountability and internal governance by applying standard procedures are available and should be consulted. Outside advice may be particularly important in organising governance within the CBO, in order to find suitable methods and to circumvent the influence of certain powerful members acting in their own interest.

When we underline the role of women in CBC, this is not to follow the general trend of political correctness, but rather based on empirical experience. Women should participate as much as possible in general meetings, as this is the most direct way to get informed and exercise a decisive membership right within the CBO. Women should also be represented in its self-government organs, as here they can directly influence the use and distribution of income. Generally it is advisable to elect women into functions, which deal with finance like accountants, treasurers or management of a butchery. Experience from many African villages has shown that they are normally more reliable, trust worthy, economical and cost-conscious than men. The involvement of women should be encouraged, but not forced through unnecessary rules and regulations.

Although women increasingly start playing a role in governmental scout forces, they are rarely employed as village game scouts or in jobs that deal directly with the management of game, as this has not been a part of their traditional roles and occupations in the past. Young men, on the other hand, are extremely important for such activities. The village game scouts recruit themselves from these age groups. In the modern world many young men lose interest in the bush and in game, unless they are involved in paid employments such as porters in poaching groups etc. As youths do not participate in village decision-making to a great extent, it is advisable to look for innovative ways to actively involve them in CBC.

8.10 Apply all Suitable Sustainable Wildlife Uses!

The interest of rural communities, which have decided to manage their wildlife, is to maximise revenue while maintaining sustainable levels of wildlife use. As wildlife is no longer a free access commodity, the "tragedy of the commons" does not apply. In theory people should be able to develop a long-term use perspective instead of short-term maximization strategies. This is difficult to achieve anywhere, particularly where the people concerned live beneath poverty levels, but it is possible nevertheless. It is important that the community is able to select their form of wildlife use from the range of options available. Some options can be combined, and this will lead to overall higher revenues. For reasons mentioned, trophy hunting is in many cases the preferred option, as it combines the highest revenues with particularly low cost levels. NGOs or governments often undermine the feasibility of CBC schemes if they withhold this option from the communities. It must be the community that

decides for which forms of wildlife use is best suited to their needs. If for example, their particular emphasis is on the creation of jobs, they may prefer labour intensive photographic tourism instead of or complementary to hunting tourism.

Which type of use or combination thereof is best, depends on the specific situation. The resource base, occurrence of game species, the market demand, how the community uses the WMA apart from wildlife and other factors have to be considered. Nobody is in a better position to judge this than the community itself. Ruling out use options based on ideological grounds of outside individuals or organisations betrays the communities.

"Formerly we fought poaching at Madaba, which is right in the middle of the Selous Game Reserve. Poaching is still a problem, but now we deal with it mainly in the villages outside the reserve – and this is due to Community Based Conservation."

Bakari Mbano, Former Director of Wildlife, Tanzania 1998



9. OUTLOOK: IF NOT COMMUNITY-BASED CONSERVATION, WHAT ELSE?

Nobody can claim that CBC is the ultimate answer to the challenges faced by wildlife conservation and rural development in Africa. It would also not be advisable for conservation's sake to de-gazette the protected areas and hand them over to the communities. However, the empirical analysis has shown that many cases in a number of countries CBC has achieved extraordinary success on unprotected village land. In other countries after years of preparation all preconditions are in place to get CBC going. In a number of countries CBC has failed, mostly because of deficiencies, which have little to do with CBC, but are typical for general developments in these countries, like bad governance and the lack of willingness of elites and bureaucracies to devolve power. After thirty years the picture of CBC is neither black nor white. There are many grey tones, yet overall we are left with more positive experiences than failures. In fact, what would have happened with wildlife and wild lands in these years without community involvement? CBC is currently the only available strategy that links the goals of conservation with the traditions and aspirations of indigenous communities, and simultaneously addresses poverty in wildlife areas.

Countries that have refused CBC also have a particularly bad record of wildlife conservation. Those who criticize or disapprove of this approach now have failed to present a viable alternative. Their only option is to fall back on and continue with the old "fences and fences approach", a strategy that in most cases has not been successful.

It is narrow-minded to consider the underlying principles of CBC as being particular to community wildlife management. To involve people in their own development, to allow them to make major decisions concerning their own lives and to encourage their own self-help are fundamental principles of all successful and free societies. Development strategies that did not comply with such principles have failed; strategies that did comply have not necessarily succeeded, but in general it has been proven that they were more successful.

Reasons why many CBC projects have failed can be identified, and it is possible to react and improve in practice by adaptive management and learning by doing. This takes time and it is not possible to find "quick-fix" solutions. A complete paradigm change needs time to consolidate. Even in the Tanzanian case the long investments into the capacity building and the creation of the legal and political pre-conditions are not lost, if the government would decide to give the communities the freedom

that they need. They have gained self-confidence, as far as wildlife is concerned, which would have been unthinkable twenty years ago. It could well be that even in Tanzania the impetus of the decentralisation process is not reversible any more.

If we disapprove of CBC, we must also keep in mind that the significant reduction of wildlife in many parts of Africa without CBC is a clear sign of failure. Taking the past as a benchmark, CBC has not performed so badly at all.

The discussion on CBC between conservationists, economists, development planners, hunters, animal rights' activists and human rights advocates remains polarized. There is little willingness of parties to listen to the other side and a lack of readiness to seek compromise. Most importantly, the communities themselves do not participate in such "dialogues between the deaf". Those who speak could use some humility and listen to and heed the advice of the people concerned.

Predictions are difficult, and particularly if they deal with the future, but let me try some: I am confident that in the next thirty years many African countries will still have a broad biodiversity within their national parks and game reserves, even if these have become islands by then. I dare not guess how much wildlife will remain in the unprotected areas where it has to exist side by side with a growing human population, which will again have doubled by then. I equally do not dare to predict if in the long run CBC will provide sufficient incentive for the people to retain this wildlife. But what I can say with absolute certainty: Without Community-based Wildlife Conservation there will be no wildlife to speak of outside the protected areas in thirty years from now.



- Anon (2009) Memorandum. Ökonomie für den Naturschutz. Greifswald, Leipzig, Bonn <http://www.bfn.de/fileadmin/MDb/documents/themen/oekonomie/MemoOekNaturschutz.pdf>
- Astle, W.L. (1999) A History of Wildlife Conservation and Management in the Mid-Luangwa Valley, Zambia. British Empire and Commonwealth Museum, Bristol
- Baldus, R. D. (1976) Zur operationalen Effizienz der Ujamaa Kooperative Tansanias, Göttingen
- Baldus, R. D. (1987) Wildlife – A Forgotten Resource. In: Internationales Afrikaforum. 271 – 277
- Baldus, R. D. (2000) Was haben Elefanten mit Ökonomie und Selbsthilfeorganisationen zu tun? In: Kirk, M. et al. (Hrsg.), Genossenschaften und Kooperation in einer sich wandelnden Welt. Lit Verlag, Münster. 497 – 511
- Baldus, R.D. and Cauldwell A.E. (2004) Tourist Hunting and its Role in Development of Wildlife Management Areas in Tanzania. Full text at: www.africanindaba.co.za/Conservation/baldus_cauldwell_2004_part1.pdf www.africanindaba.co.za/Conservation/baldus_cauldwell_2004_part2.pdf www.africanindaba.co.za/Conservation/baldus_cauldwell_2004_part3.pdf
- Baldus, R.D. and Cauldwell A.E. (2005) Tourist Hunting and its Role in Development of Wildlife Management Areas in Tanzania. Game and Wildlife Science. 21, 2005
- Baldus, R.D. et al. (2001) Experiences with Community-based Conservation in Tanzania. Dar Es Salaam. Tanzania Wildlife Discussion Paper No. 29
- Baldus, R.D., Damm, G.R. and Wollscheid, K.-U. (2008) Best Practices in Sustainable Hunting. A Guide to best Practices from Around the World. CIC-FAO, Budapest
- Baldus, R.D., Kaggi D.Th. and Ngoti, P.M. (2004) CBC: Where are we now - Where are we going? In: Miombo – The Newsletter of the Wildlife Conservation Society of Tanzania
- Barnett, R. and C. Patterson (2006) Sport Hunting in the Southern African Development Community (SADC) Region: An Overview. Johannesburg: TRAFFIC East/Southern Africa
- Bellon L. (2008) A Treasure in my Backyard: Suleiman Markhor. Ownership and Sustainable Use of Natural Resources in North Balochistan, Pakistan. SUSG-C Asia, Quetta
- Binot A. et al. Community Involvement in Natural Resources Management in sub-Saharan Africa – Regional Overviews. In: Roe, D. et al.
- Binot A. et al. What has CBNRM achieved in Africa? The “3Es”- Empowerment, Economics, Environment In: Roe, D. et al.
- Blomley, T., Nelson, F. and Sandbrook C. (2008) Community Involvement in the Management of Natural Resources. A Review of Experiences from Eastern Africa. Unpublished Report for IIED. mimeo
- CIC and FAO (Eds.) Hunting: A Tool for Sustainable Rural Development. La Chasse: Outil de Développement Rural Durable. Proceedings of a Symposium at the CIC General Assembly in Marrakech. May 2008 (On CD-Rom available from CIC)
- Dülfer, E. (1974) Operational Efficiency of Agricultural Co-operatives in Developing Countries. FAO, Rome
- Gillingham, S. (1998) Giving Wildlife Value: A Case Study of Community Wildlife Management around the Selous Game Reserve, Tanzania. Diss. University of Cambridge. Cambridge
- IIED International Institute for Environment and Development (2006) Practical Tools for Community Conservation in Southern Africa. Participatory Learning and Action 55
- Institute of Resource Assessment (2007) Assessment and Evaluation of the Wildlife Management Areas in Tanzania. Dar Es Salaam
- Jansen, E. (2009) Does Aid Work? Reflections on a Natural Resources Programme in Tanzania. Bergen. <http://www.u4.no/document/publications/cfm>
- Journal. 40 (2): 603-643
- Kothari, A. (2008) Protected Areas and People: the Future of the Past. In: Parks 17(2): 23 – 34
- Kühl, A. et al. (2009) The role of saiga poaching in rural communities: Linkages between attitudes, socio-economic circumstances and behaviour. In: Biological Conservation (in press)
- Leader-Williams, N., Baldus, R.D. and Smith, R.J. The Influence of Corruption on the Conduct of Recreational Hunting. In: Dickson, B., Hutton, J. and Adams, B. (2009) Recreational Hunting, Conservation and Rural Livelihoods: Science and Practice. London, 296 – 316
- Lindsey, P. Trophy Hunting in Sub Saharan Africa: Economic Scale and Conservation Significance. In: Baldus, R.D., Damm, G.R. and Wollscheid, K.-U. (2008)
- Murphree, M. W. (2009) The Strategic Pillars of Communal Natural Resource Management: Benefit, Empowerment and Conservation. In: Biodiversity Conservation (2009) 18: 2551-2562
- Murphree, M. W. (2009) The Strategic Pillars of Communal Natural Resource Management: Benefit, Empowerment and Conservation. In: Biodiversity Conservation (2009) 18: 2551-2562
- Murphree, M.W. Community-based Conservation: Old Ways, New Myths and Enduring Challenges. In: Baldus et al. (2001): 5 – 17
- Nelson F. and Agrawal A. (2008) Patronage or Participation? Community-based Natural Resource Management Reform in Sub-Saharan Africa. In: Development and Change 39(4): 557–585
- Nelson, F., R. Nshala, and W.A. Rodgers (2007) The Evolution and Reform of Tanzanian Wildlife Management. Conservation and Society 5(3): 232–61
- Ostrom, E. (2008) Governing the Commons. The Evolution of Institutions for Collective Action. Cambridge. Reuter's news of October 12th, 2009: Nobel economics winner says answers lie locally. Retrieved December 1st, 2009, from: <http://www.reuters.com/article/topNews/idUSTRE59B47T20091012>
- Rodary E. Mobilizing for Nature in Southern African Community-based Conservation Policies, or the Death of the Local. In: Biodiversity Conservation (2009) 18: 2585–2600
- Roe, D. and Nelson F. The Origins and Evolution of Community-based Natural Resource Management in sub-Saharan Africa. In: Roe, D. et al.
- Roe, D., Nelson F. and Sandbrook, C. (Eds.) (2009) Community Management of Natural Resources in Africa: Impacts, Experiences and Future Directions. Natural Resource Issues No. 18, International Institute for Environment and Development, London.
- Siege, L. Community-based Conservation: 13 Years of Experience in Tanzania. In: Baldus, R.D. et al. (2001) 17 – 25
- Songorwa, A. N. (1999) Community-Based Wildlife Management (CWM) in Tanzania: Are the Communities Interested? World Development. 27(12): 2061-2079
- Songorwa, A. N. (1999) Community-Based Wildlife Management: The Case Study of the Selous Conservation Programme in Tanzania. Unpubl. PhD Thesis. Lincoln University, New Zealand
- Songorwa, A. N., Buehrs, T., Hughley, K. F. D. (2000) Community-Based Wildlife Management in Africa: A Critical Assessment of the Literature. In: Natural Resources Journal, Volume 40, No. 3.
- Taylor R. (2009) Community-based Natural Resource Management in Zimbabwe: the experience of CAMPFIRE. In: Biodiversity Conservation (2009) 18: 2563–2583

Some relevant websites:

<http://www.cic-wildlife.org/index.php?id=176>

<http://cic-sustainable-hunting-worldwide.org>

<http://www.fao.org/forestry/44517/en/>

<http://www.policy-powertools.org/related/CAMPFIRE.html>

<http://cic-sustainable-hunting-worldwide.org>

The papers by Baldus are available on <http://www.wildlife-Baldus.com>



ANNEXES

Case Study 1

RURAL PEOPLE AND WILDLIFE IN ZAMBIA'S CENTRAL LUANGWA VALLEY: PRECAUTIONARY ADVICE FROM A LONG-TERM STUDY by Stuart A. Marks PhD

In the process of summarizing a long term (1966–2006) field study on continuity and changes in beliefs and uses of wildlife within one small scale African society, I am asked to condense what I have learned that might be helpful for wildlife managers. My studies began with a year's residence (1966–67) within Zambia's Munyamadzi Game Management Area (MGMA) to establish cultural and environmental baselines for a dissertation (1966–67) and I have continued with these studies in subsequent years. During each decade, I have spent up to a year residing here on related inquiries which incorporated a broad range of rural residents, government administrators and managers, traditional (local), national, and international hunters, safari operators, missionaries and NGO field staff. My studies focused mainly on rural people, their livelihoods, and welfare with a particular concentration on wildlife, the major resource of continuous concern for both residents and outsiders.

My funding during each period in Zambia came from impartial foundations which allowed me access to government projects while enabling me to keep a separate identity. This separate identity allowed me the freedom to follow leads and issues as they emerged within the villages where I resided rather than being tied to the bureaucratic agendas of donor and government programs. In my view, this independent stance from which to observe cultural and environmental changes together with my opportune residences within this GMA over five decades affords a perspective uncommon with government and donor managers restricted by their own norms, objectives, and expectations.

I begin this paper with some background and then divide my studies into two phases. I summarize for each period the main continuities and changes in village life I observed as well as the status of wildlife populations. This division allows me to compare village welfare and livelihoods as a function of the national economy and wildlife policies before and after the implementation of a state and donor sponsored “community-based” wildlife regime. These comparisons are the basis for my conclusions and counsel.

BACKGROUND AND CONTEXT

My interest in other people and in wildlife grew from youthful exposures and residence on a development frontier in the (Belgian) Congo (1948–1957). From these formative experiences, I realized then that the objectives and development programs of this (colonial) state widely diverged from its voiced claims and from the purposes and the aspirations of its African subjects. As a youth, I was freer to explore and face different cultural experiences with Congolese friends than were my parents and their colleagues, who as adults were saddled with trying to change Africans into becoming like themselves. I learned about cultural differences and about deference, about the importance of trust and humility. Later as a graduate student with a particular interest in wild animals, I wrote a research proposal to study local environmental knowledge and uses in a central African country. I hoped that my study would show that (at least some) rural Africans had sustainably used and managed wildlife and other resources as components of their livelihoods. This learning was not conventional wisdom then when outside consultants were employed to strengthen the centralized administrations of African governments soon to become independent. I assumed this research would provide materials from which planners could develop different resource regimes modeled to fit the needs of emergent peoples than would the earlier top-down, export models then in vogue. The Ford Foundation supported my proposal with a multi-year fellowship. It suggested that I, with training as a biologist, would benefit from additional academic perspectives from economics, history, anthropology, languages and that I should find a suitable host institution that would provide the connections and leverage to complete my study. An additional year of language and social science expanded my approach and methodology while Zambia, then on the cusp of independence, through its Ministry of Lands and Natural Resources (MLNR) sponsored the proposal and my affiliation with the new University of Zambia.

The Ministry (MLNR) advocated that I study the Valley Bisa in the MGMA, one of their most productive wildlife areas within the Luangwa Valley, yet one difficult to access from the outside. This GMA, a 500 square kilometer corridor of land encompassing two perennial rivers, was surrounded on three sides (north, south, east) by game reserves (in 1970 these became national parks) had the Luangwa River as its eastern boundary and the steep Muchinga escarpment as its western border. Some 5500 Valley Bisa resided there in small villages as subsistence farmers and migrant laborers. These Luangwa Valley residents depended upon wildlife as an important complement to their agricultural products and as a safety net in times



of too little or excessive rainfall. For them, the hunting of and protection from wildlife were both necessary and customary. The necessity came from the presence of the tsetse fly, which prevented livestock husbandry, and from the need to protect human life and crops from competition. Wild meat was an important supplement in ordinary diets and largely the produce of a few selected men. The GMA was known throughout Zambia for its high per capita consumption of wildlife meat and for its trades of bushmeat for grains during famines. Within this matrilineal society (membership in clans depended upon one's mother's affiliation), gender roles were that related women engaged in mundane agriculture while most men assumed the expansive and chancy activities in hunting, trading, and migrant labor.

The suggested location and some anecdotal information about its isolated residents was all I knew in 1966, prior to my arrival in Zambia. It seemed like an ideal site for learning about local cultural adjustments to colonial and post-colonial wildlife policies. The initial studies were crucial for understanding what took place here and contextualizing its transformative effects beginning in the late 1980s. In 1988, donors created and supported government initiatives in "community-based" wildlife management—Zambia's ADMARE (an acronym for Administrative Management Design for Game Management Areas). I refer to ADMARE as a "community-based" wildlife program (surrounded by quotation marks), because it was not built upon local level initiatives. Rather, outside wildlife experts and consultants (those administrative designs!) put it together and the program represented international and outsider interests rather than local ones. People may give names to anything they create, but this label of "community-based" to cover an alien strategy that undermines the needs of others in the name of conservation seemed to me to epitomize the tip of an iceberg of misinformation that floats on the waters of economic development. My last study of four months in 2006 was to inquire from MGMA residents their assessment of the impacts on their welfare and livelihoods after 18 years under this program.

At independence in 1964, Zambia had a very strong economy based on its main export of copper. Despite the rapid training and transfer of administrative functions to Zambians, until the mid 1970s, many of the upper echelon officers in natural resources remained expats and former colonial officers. These experts were determined to prove that their wildlife values of tourism, safari hunting and the production in wild meats could contribute significantly to the national economy. The Zambian President, Dr. Kaunda, supported this initiative with increased wildlife staff and resources while its MLNR hosted a five-year international UNDP/FAO Conservation and Development Project within the Luangwa Valley. The project's staff made wildlife counts from aerial surveys, constructed land use and habitat maps, drafted conservation legislation, developed some environment education packages, trained some Zambians as biologists in northern countries, and re-designated most game reserves as national parks; yet the project largely failed to demonstrate centralized management of wildlife production and marketing as a significant national economic asset. One of the wildlife department agendas, unknown to me until my arrival in-country, was their hopes to gather the political clout and data from these international connections to enable them to resettle the Valley Bisa from the MGMA. Their resettlement agenda would allow the department to connect the expansive game reserves within the western Luangwa Valley and to administer them without contending with local resistance! The department was unable to obtain this political objective, yet the 1970 legislation to upgrade the South Luangwa Game Reserve into a national park incorporated a large section of the MGMA, the Chifungwe Plain. This extension of state land and the alienation of GMA land was imposed as an external fait-accompli and without local consultation. Later this land issue and ADMARE wildlife policies would emerge as a local cultural maneuver to solidify Valley Bisa identity against future state plans.

My initial studies (1966-67) established a base line of cultural (for residents) and environmental (wildlife counts, habitats) variables sensitive to change within the center of the MGMA. I linked these variables within a system, a context then which largely demonstrated residents' earlier responses to colonial policies. The colonial administration had recognized formerly several small Valley Bisa chiefs in the western Luangwa Valley and later reduced their numbers under a single chieftaincy. In the 1930s, the colonial administration appointed a young, progressive individual as the sole chief; this individual died in 1984 after a reign of over 50 years. With the declaration of the game reserves in 1938, people living within the designated reserve

were encouraged to settle under this new chief or elsewhere in the Luangwa Valley. The chief had two important political objectives—to integrate his chiefdom (which he accomplished through his marriages to women of other lineages) and to reign within the colonial state's policy of Indirect Rule. Given the comparative difficulties in administering this small and marginal territory within a very large district, this chief assumed a large measure of autonomy without clashing noticeably with colonial officials. Given his proximity to important game reserves, European wardens always suspected him (often unsubstantiated) of engaging in illegal wildlife activities and in defending similar acts among his subjects. The chief was able to find "common ground" with other colonial officials that outranked those within the game department.

During his tenure, this chief and his local affiliates incorporated local, regional, and colonial elements into a local wildlife regime that operated as an effective patron-client polity providing dependents with game as food while protecting property and lives. This scheme incorporated cultural rules designating who could hunt, where, and how its proceeds should be distributed. The face-to-face monitoring in small, scattered villages meant that expected norms were difficult to circumvent; yet there were ways to revitalize this scheme when individuals failed in their duties. From the standpoint of its resource base, wildlife increased within the MGMA reaching their highest numbers for the century in the 1970s. The local regime focused on relationships among people rather than on the management of wildlife or habitat resources per se. Its world view was restricted, place based, culturally-coded and operated religiously on the assumption that as long as personal relationships were harmonious there would be no shortage in the resources needed.



A hunting patron instructs a client through a stage in lineage ritual performance over the carcass of the latter's first elephant. Patron's eyes are open as he holds the prescriptive potions in his left hand while kneeling with his client over the trunk of the elephant. Client has his eyes closed, potions in his mouth which will be applied to the lips of the trunk. Some details of this ritual were learned from the Chikunda (Portuguese affiliated elephant hunters) who operated in the Luangwa Valley during the 19th century and incorporated later as status markers legitimizing local elephant hunters among the Valley Bisa. Further details of these rituals in practice are described in *Large Mammals and a Brave People*. [Photograph by author in 1967].

Although Valley Bisa society is organized in lineages and clans recruited by descent through women, elderly men controlled the dispositions of power and authority within the villages. During colonial and for a decade after independence, most men spent their youths and middle age as laborers in the towns. In 1967 up to 70 % of these men were away employed as displaced laborers; consequently most residents were women and children as relatives and clients of fewer older men. Elderly men and women were the managers of other villagers' daily activities, rituals and interpreters of events, which they cloaked with reference to ancestral dispositions. Recruitment into the role and ranks of lineage hunters was selective—beginning with a youth's dreams, its interpretation and subsequent mentoring by elders. Elders of each lineage allocated a few of its manpower (usually 4 men of different ages) to remain in the village for hunting, for labor and for protection while the other men pursued work in towns. Cash was an important aspect of lineage welfare and these workers returned with goods or sent remittances to their kin. Locally, transactions were mainly by barter and exchange.

A few men trained to hunt procured animal protein and offered protection against wildlife depredations. Since the elders "owned" the weapons (mainly muzzle-loading guns), younger men had to borrow these guns, did most of the hunting and were obliged to follow their elders' dictates in disposing of animals killed. The polity was based on the patronage and seniority of elders, on recruitment through women, on the management of weapons and the provisioning of meat and protection, on the subordination of women and young men, and on a host of norms centered on the past (ancestors) together with an assumption that welfare depended upon social harmony. The main species taken were buffalo, impala and warthog—all species remained abundant as their hunters were mainly adult males. As the ritual "owner of the land," the chief was due "respect"; work tribute from his subjects and portions from the kills of certain important animals on his land. By these means, the chief monitored the health of his landscape. Since this people-resource system was culturally-constructed and site-specific, members knew its rules, and conformity remained high for decades.

The colonial government built a seasonal track into the corridor in 1960 to increase its access and surveillance. This administration did little to improve the infrastructure in the area beyond constructing a temporary dispensary and a government primary school (grades 1-3). Both of these structures were upgraded in the late 1970s when the Zambia administration resolved not to resettle the Valley Bisa. Education standards



at this school remained low, and girls were discouraged from attending schools. From the government's point of view, this GMA generated revenues from safari hunting while most men worked elsewhere. Local employment was held by a few national civil servants at the school and clinic. Even the seasonal safari operators brought in their staffs from elsewhere, a circumstance that did not change until 2000 when employment of locals became part of the mandate for granting safari leases.



Local hunters understood the limitations and structure of muzzle-loading guns, assimilating them into their own culture and learning how to manufacture their own models. These weapons were effective at close range, but the wounding rate of prey was often high. From his ambush atop an anthill, a hunter waits for an approaching buffalo herd to close the remaining distance. The hunter has his gun and hunting licenses in his back pocket. [Photograph by author in 1973].

As this was no Eden, individual and many social problems remained unresolved and accumulated. These predicaments were mirrored in the declining health of the chief, heavy conflicts within his lineage, and in his eventual death in 1984. Inevitable stresses became visible in the life expectations of different generations and in the demographic shifts toward younger residents, in the progressive erosion of local autonomy that followed contractions in the national economy and in the rapid expansion of the informal economy, in the widespread import and use of unregistered muzzle-loading guns that undermined elder control and contributed to the widespread slaughter of wildlife, meat and ivory markets, and in the increased frequency of droughts and floods which made residents increasingly dependent upon outside connections and relief aid. Barely noticed initially, these incipient differences built momentum that eventually led to destructive consequences for most residents and wildlife. These topics were among those studied during the second phase.

These earlier studies are available as a dissertation (Michigan State University), as two books (Large Mammals and a Brave People: Subsistence Hunters in Zambia (hardback 1976, reprinted as a paperback with updates 2005) and The Imperial Lion: Human Dimensions of Wildlife Management in Central Africa (paperback 1984, reprinted 4x), and as journal articles published in Zambia, East Africa, and elsewhere. These materials document Valley Bisa history and settlement, local knowledge and environments, hunting strategies, life histories, previous cultural changes, and assessments of local impacts and resource outcomes.

The widespread slaughter of wildlife then taking place throughout rural Africa. The theory behind this program, to encourage rural participation in wildlife conservation, was appealing. Rather than all taxes on safari hunting going to the state treasury, donors encouraged government to return a portion (75% of some revenue streams) to a local GMA committee for its use in development and for investments in wildlife management. In practice, the program was never straightforward, for the wildlife department determined what projects were fundable and when and the amounts of funds dispersed to GMA communities. The program created a national (Wildlife Conservation Revolving Fund) and a local level institution (Sub-Authority) to receive and manage community funds. These funds were for local employment and for buildings such as for health and education together with the training to improve local capacities in critical management skills. Lacking transparency, undisclosed amounts of funds went unaccounted for. The new chief chaired the Sub-Authority composed of resident civil servants, the ADMADE Unit Leader, and a few appointed headmen. Until the 1991 elections, this Sub-Authority was responsible to the District Wildlife Authority headed by a political appointee, the District Governor as well as to the wildlife department. Thereafter, it was answerable to the wildlife department and the Ministry of Tourism.

The new program began with much fanfare. Residents were assured worlds of material goods and development should they stop "poaching" and allow wildlife to increase—increases that would boost their community revenues. Initially MGMA residents responded euphorically as many thought government was listening to them. These hopes were soon dashed when their solicited ideas were squashed by "more knowledgeable experts" or were not acted upon. Their doubts were reinforced when they realized that the district warden, a young man known for his illegal ventures and trafficking in local wildlife products, was responsible for implementing their program. Further, the changes in wildlife policy made little sense locally nor were they explained appropriately. Residents learned these alterations as wildlife scouts raided households for unregistered firearms and as individuals or their friends were arrested for violations. Although promoted as a genuine Zambian plan, the programs' implementation and inexperience revealed that the drive behind this schema came from elsewhere, that it was influenced by neoliberal economic thinking and that its main beneficiaries were outsiders.

The second period began with a year-long residency in 1988-89 which coincided with the implementation of ADMADE and with the recruitment of young local men as wildlife scouts. This year was followed by a two month visit in 1993, by shorter visits in 1997, 2001, 2002, and 2006. The last visit was a 4-month assessment of ADMADE as reflected on the ground in the opinions of a broad section of residents together with longitudinal observations.

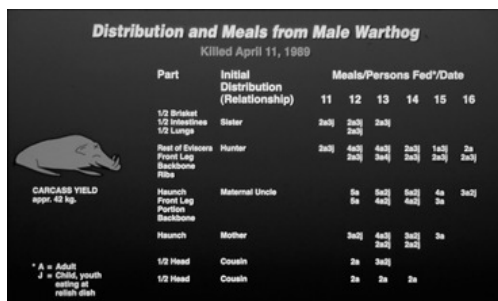
Upon the death of the chief in 1984, there were bitter squabbles within the chief's lineage over who was the legitimate successor to his title, a conflict that began with the colonial consolidation of several small chiefdoms in the early 1900s. Two candidates had powerful outside supporters with different interests in continuing their access to valley wildlife. This dispute took four years to resolve while massive elephant poaching was occurring in the Luangwa Valley. The successful candidate, as acting chief in 1988, had a windfall of revenues to dispense as the chair of the Sub-Authority under the new ADMADE program. He had spent most of his adult life on the Copperbelt, was a Catholic, monogamist, and quickly settled into establishing his hegemony. His patronage was based in his sanctioning of appointments and in employment authorized under the local ADMADE program. Employment included those for wildlife scouts, community teachers, full and part-time workers for building, for road clearing, and for daily chores. The chief also controlled appointments for those receiving sitting fees, for travel and certain discretionary funds. His priorities became clear in his decisions on structures and where to build them. These constructions included a new permanent palace, the completion of a permanent Catholic church, a community building, grinding machines, water wells, the construction of a permanent wildlife scout command center, additional building for the school—all within the neighborhood of the palace, a site locally designated as Palace Central. Other areas got very little, if any, tangible benefits. Furthermore, the chief was not shy to use the armed wildlife scouts as an escort or as a force against his detractors. Government oversight and accountability were slack, for similar priorities were visible in other Zambian GMAs. These visible decisions, about the placement of benefits within this and other Zambian GMAs, eventually led to further donor interventions and to the establishment of a Zambia Wildlife Authority (ZAWA) and new wildlife legislation in 1998.

Locally, ADMADE began with outsiders and officials making large promises to MGMA residents. Donors had initiated and funded this program to counter

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The local concentration in employment and power at the palace brought in an influx of settlers into the neighborhood of the chief's palace. This locality became the largest village grouping of the area under the Community Resources Board (CRB) – the successor to the Sub-Authority under ZAWA in 1998. In addition to employment, people sought land and the protection of their fields and property against large marauding mammals. The chief generally encouraged such in-migration, for these settlers immediately increased his clients ("respect" in the cultural sense) and he assumed the authority to send the scouts selectively against "problem animals." But this increased density of people created problems, for Palace Central, a comparatively small area with its permanent buildings, had used the same soils and close-by natural resources continuously for more than 70 years. As a result, this area's natural resources were approaching their limits under customary tenure agreements as clientage, employment and outside resources became critical for individuals with the appropriate affiliation. Residents faced declining soil fertility and poor crop yields were further compounded by frequent floods and droughts. Men and women spent increasing time to locate in the nearby bush and return with suitable building materials, edible plants, and firewood. Residents were conscious of these higher costs in making ends meet compared with elsewhere in the MGMA. Competition for the few jobs was fierce as was the rise in personal assaults and witchcraft accusations. The highest burdens fell upon the elderly, upon women whose household chores are continuous, and upon those unable to find employment. Repeated wildlife counts in this area showed that impala, warthogs, zebras and other smaller wildlife species had become noticeably fewer as they are subject to non-selective snaring and by takings with dogs in addition to constant human forays in the bush. In contrast, buffalo and elephant were frequently seen or heard in the fields and had increased noticeably in numbers and boldness to become a persistent danger.

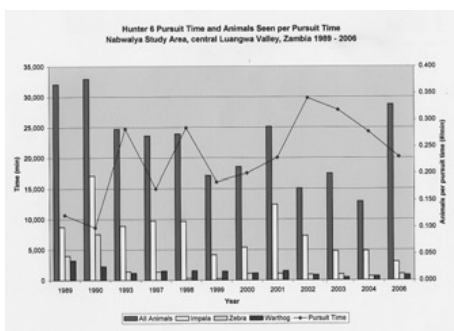


Meat from a hunter's take of small game was nominally distributed among his close relatives, while that from larger prey (such as buffalo and elephant) was more widely distributed among his kin and clients or might be exchanged or sold for other goods. This figure shows the distribution and durations of consumption from a single warthog carcass in 1989.

By 2006, the MGMA population had increased to some 10,000 residents. Recent cultural processes had shifted significantly in tandem with regional influences and trends. These transformations include those in beliefs (from ancestral to charismatic Christian values, from a lineage focus increasingly toward individualism); most recognized the chief's office as the main political and economic decision-making authority in village life. Villagers continued to value wild animals in their own ways—for consumption or as trades for other goods—as most people received little, if any, tangible benefits from the “community-based” wildlife program. They also witnessed the high personal costs paid for living with large mammals and crocodiles (11 deaths and 138 injuries caused by wild animals recorded between 1990–2007) and for the losses they paid each year for animal depredations in their fields. Moreover among the 460 residents in all village groupings intensely interviewed, 38 % responded that either they, or a close relative, had been arrested by wildlife scouts. This arrest rate for residents had not dropped since the program began, indicating that benefits from the program were changing neither behavior nor attitudes. Residents increasingly depend upon “poaching” natural resources and the properties and welfare of others.

Unfortunately and tragically, large gangs of commercial poachers from outside the GMA were the main wildlife killers and often too dangerous for the wildlife scouts to tackle. In its present condition, the Zambian state appears to have neither the resources nor the political will to service the needs of the people in this GMA nor the capacity to sustain wildlife there. Despite its heavy emphasis upon law enforcement and “antipoaching” patrols, the state has yet to achieve the ascendancy of its management protocols over the wildlife claims of local residents and of outside gangs, who refuse to recognize its authority or entitlements.

The local status of some wildlife species (mainly the larger forms— buffalo, elephant) has improved under the community-based wildlife program; others (such as impala, zebra, and warthog) have decreased. The smaller species are taken mostly with snares and hidden for consumption in households. The killing of larger species incurs higher risks of detection and arrests by wildlife scouts. These histograms are based on repetitive tallies (10 or more per month in dry season) by local hunters within a large study area. Over the years, these local hunters have invested increasing amounts of time to find comparable numbers of wild mammals. The high numbers for all mammals observed in 2006 were mainly large herds of elephants and buffalo that increasingly stayed close to the villages, rivers, and fields.



Few local people had full-time jobs, mostly community scouts and teachers or safari workers. Their resources supported many more people and multiple marriages. Casual labor was more widely distributed among the village groupings. Average household income was less than one US dollar a day which did not cover the community's “opportunity costs” under the program. Given the declining natural resource base, frequent famines, and increasing population, many villagers were at a “tipping point” of more drastic transformation, dependency, and increasing poverty.

What of supposedly representativeness and achievements of the imposed local institutions— the Sub-Authority or the Community Resources Board (CRB)? A review of their records shows that their members were neither democratically elected nor responded to their constituents' needs for development or for information. Agendas were a shambles, dictated largely by ZAWA, outside agents, or financial crises, rather than by local needs or initiatives. Board members as clients of the chief focus on the distribution of inconsistent revenues (diminished considerably over time) and on pre-determined projects and structures that take time to complete. With insufficient funding to make a significant impact, the CRB had become a facade captured by internal and external agents who subvert much of its resources for their own purposes. Meantime, community wildlife scouts and teachers are not paid their salaries for periods up to a year or more. Board membership and employment for the few becomes ways for individuals to escape poverty, if only temporarily, for most did not remain even if they managed to complete their terms of office. Wildlife management is mainly antipoaching exercises pushed by outside interests – a wasteful expenditure of community funds. Perhaps reflecting on the past, an elderly resident summarized this position in 2006 as follows: “Animals are now much fewer than we are. They have more protection and rights than we have. We are restricted and are mere objects in our own land. Many government leaders, who passionately enjoy the revenues from wild animals, wish we educated them this alley to allow Honourable Animals to walk, reproduce, and graze freely. What a dream! We will die for and in our land. I trust you will understand that the lack of game meat is at the root of our protest and scarcity of what we eat today.”

Residents have given up on ZAWA as a viable partner in development for the Authority deadens local initiatives, monopolizes knowledge creation, and is reticent to protect local residents and their properties from wildlife. Government has cut back on its supplies and support for rural education and health which have made these local services now dependent upon the community, safari operators, and missions.

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Many residents would agree with the ADMADE principle of exchanging some of their wildlife for development revenues, but qualify this acceptance with a stipulation that benefits be more equitable. More women than men concurred with a statement that such a transaction and exchange would be “fair”. Women's subsistence roles (outside of crop protection) are less affected by wildlife policies, and their children benefit from education and the health clinic. Residents' priority (since 1973) has been for the construction of a good road connecting them to the services and markets on the plateau. For most, this road would be the most appropriate means to improve their welfare. From experiences elsewhere with roads and perhaps because ZAWA appears incapable of controlling the inevitable poaching along such a road, ZAWA and safari operators are against this development. Safari clients employ light aircraft to fly into the hunting concessions.

Findings from these latter studies are published as chapters in books, as consultancy reports, as well as articles in African, European and North American journals. Their topics include local incentives under ADMADE, a method for using local actors to make wildlife counts and analyses of several years' data, a century's overview of changes within the central Luangwa, contrasts between lineage husbandry and managerial ecology, colonial political alignments, and a local history and legacy of ADMADE. The 2006 assessment of ADMADE (On the Ground and in the Villages: A Cacophony of Voices Assessing a “Community-based Wildlife Program After 18 Years) was printed in limited copies and a manuscript describing the local system of wildlife husbandry and its transformation is in process of publication (Life as a Hunt: A Reshould of Identities, Images, and Illusions on an African Landscape).

SOME IDEAS TO WORK WITH

For years most of ZAWA's failures, including those of its predecessors and the “community-based” program were criticized in numerous consultancy reports and on the ground by MGMA residents. Many of these problems stem from its legislative mandate, from ZAWA's lack of staff numbers and capacities, of progressive research plans and of adequate funds. Yet the government has lacked also the political will to address these continuing resource issues as it continues dependent upon donor and outside funding. Maybe this wildlife regime has become a government “Trojan Horse,” a splendid political animal grazing on communal pastures, delivering most of

its capital and other “goods” to outsiders, including the pockets of officials. If so, the stakes seem high against change for the needs for patronage are extensive, including special licenses, bushmeat for political rallies and for other purposes, as well as payments for hunting concessions and international junkets. As the undeclared “primary beneficiaries” of the current program, these interests and institutions stand to lose a lot if confronted with their privileged access and its overall costs to local residents. The main question wildlife conservationists should ask is the following:

Is a single sector, centralized government resource agency (wildlife, forestry, fisheries), whose structural legacy is the product of a former colonial export economy, the appropriate institution to implement multiplex cultural and economic development for Zambia's rural peoples?

My answer is NO. My research shows that at one time, the Valley Bisa had the initiative and space to construct a resource regime that worked for them even within a colonial envelope. Their system had laws, but they were their laws and local leaders could handle them. These leaders made the rules and their clients largely followed them. The wildlife prospered (increased) up to the point where the local cultural envelope fell apart and was no longer able to respond to overwhelming outside pressures. Their focus on management was with the human or user side concerned with recruitment, distribution of products, causation or reasons for things not happening as expected, hierarchy and status, and operational procedures. As long as individuals kept the right balance in their relationships, they could expect wildlife to meet their needs. My argument is for managers to facilitate and to become sensitive to similar local cultural counterparts, granting such insider knowledge and the local organization of users to what outsiders may know about resource indicators of which smaller groups may not be aware. I am not championing a return to the (or even to this) past, but wishing to challenge wildlife managers to facilitate rural people in using their creative energies to formulate and engage in resource regimes that they can live within and sustain. My premise is that durable conservation solutions to poverty begin with the understandings and engagements of local people; outside expertise remains a local option, not something imposed forcibly. Quick fixes and infusions of technological and material assistance won't solve these cultural issues. Outsiders can listen, learn and only facilitate these processes. With this background of studies and with hope, I offer the following perspectives to wildlife managers and others who search for appropriate ways and cultural means to sustain local livelihoods and identities while conserving wildlife in rural areas.



If one is employed by the state, a NGO, or a private firm, it is likely that s/he will be expected to perform a given role and to achieve stated objectives. Each organization has its own culture, ways of thinking, acting, and compensation; these preconditions may not allow individuals either the flexibility or time to follow different leads even if they appear pertinent for the mission. Most contract work allows little time for reflection or for spending much time outside of an office.

Assignments vary in the possibilities for individuals to create their own agendas and change objectives from those assigned to the group. Any exercise in resource planning is either innovative or conventional. Either it expects to build a new collective or social order, or it strives to reinforce an existing one. Programs in resource development require explorations for new social forms; those in resource conservation seek to strengthen the status quo. Wildlife is not just a commodity but has both "social" and "natural" aspects, both of which must be studied, understood and integrated. Groups, like the Valley Bisa, have no vernacular term that translates into "environment," "wildlife," or even "conservation"; for it is assumed that where people are, they would find adequate materials to meet their needs.

Wildlife regimes capable of sustaining themselves must link actors with their resources in a meaningful way continuously. Every group has ideas about what has worked or might work and why. Therefore, seek those who generate local knowledge and find ways to challenge them in collective problem solving, implementation and developmental processes. By encouraging these individuals and by facilitating collective, culturally relevant resource exercises, projects would seem to have a better chance of producing something constructive than treating local residents as passive recipients of knowledge they can't own.

2. Search for Links Between Macro and Micro Issues

Although not readily visible, national and regional forces influence attitudes and behavior throughout rural areas. Even those people now in supposedly remote areas have always been in contact with other groups. Today there is constant mixing of and movements between rural, urban and global communities. Regional and local behaviors and values are influenced often by cultural interpretations of this history and by the nature of past relationships. Wherever a resource project is located, other agents have been there before leaving behind expectations and conditioning responses to outsiders and their missions.

Another local issue in 2006 was the inevitable topic of "problem animals," the devastating effects of wild mammals on cultivation and human lives. Wildlife scouts were no longer responding to local requests for protection, instead they were directed to save these animals for safari clients to take on license to produce more revenue. Residents also expressed their concerns about the lack of progress on government promises of decentralization and about inadequate revenues for community uses.

Local knowledge is not necessarily wisdom about stable land use practices, nor is it necessarily a suitable guide for sustainable resource uses. It likely has premises and purposes other than those claiming universal application. Its utility may indicate material values and local historical, political, and cultural values that people have invested in their resources. To dismiss these historical associations and environmental knowledge, wildlife managers imperil the impacts and longevity of their own values and mission. Administrators are often pushed strategically to rationalize environmental practices to ensure "conservation" (in their own terms) even as they are aware that by doing so they shift from very old, site specific traditions and procedures that have led to producing and even sustaining these same environments until rather recently. Such arrogant presumptions and the privileging of outsider knowledge can lead to the dismissal of local participants as knowledgeable actors and to the curtailing of their abilities to make contributions. Furthermore, such opinions expressed in actions may produce outcomes that perpetuate the most corrosive sort of poverty – local impotency and dependency.

4. Learning What, When, and How to Ask

Groups of people, who have invested their time and efforts within a given environment, have developed customs by which they identify, distinguish, appraise, and imagine their pasts and how to cope there. Their body of knowledge is linked intricately to the ways they live and is expressed in their metaphors (meanings). Key expressions (metaphors and figurative language) and ideas reoccur in how people talk about themselves and how they interpret events. Like the Bisa discuss "spirits" as active agents in their lives and to explain why things happen in certain ways. They also believe in the capacities of relatives to cause loss of an individual's power and agency through witchcraft or through magic. They might talk of past deprivations hoping to elicit an outsider's sympathetic response. Access to such conventions reveals alternative ways people interpret events and how they struggle for resources that matter to them.

My experience is that rural residents throughout southern Africa are suspicious, distrustful, and sometimes hostile to new government initiatives because of what has happened to them earlier; these responses may vary by sex, age, location and experience. The decline of the national economy, adverse trade relations between urban and rural areas, costs and subsidies for agricultural commodities elsewhere, national wildlife policies, communications and frequency of access all played parts in the transformation of earlier Valley Bisa relationships. Coupled with a demographic inversion (large numbers of youths), these factors overturned on its head the older system of elder control and privilege.

Given the disparity between newcomers as agents of change and rural residents in terms of local knowledge and past history, I offer a precaution. It may be appropriate to be suspicious of locals who readily seek you out or wish to join something new. These individuals may be marginal in their own group or local elites seeking to enhance their positions. Projects will always attract their "yes" men and women, who rapidly learn and provide the appropriate answers that managers crave about their projects. These individuals may already be aware that projects have short life spans, that one can gain in the short run by complying with project objectives and that, when the project ends, nothing much changes. Behind each of these solicitous individuals there are scores of silent people that outsiders never hear or see. Making a difference means penetrating this "silence" and gaining an understanding of what the project could mean for them.

3. Grounding and Learning Local Issues

Some contentious issues may remain dormant for years before surfacing. Land alienation was such an issue in the central Luangwa Valley. When this subject surfaced in 2000 its initial context seemed a simple grievance between a snubbed chief and ZAWA for not consulting him over the establishment of a permanent boundary between the GMA and the bordering National Park. Yet this matter developed rapidly into a major political confrontation with meetings with government ministers and agencies, correspondence with the President, verbal and printed threats and accusations that built upon the history of appropriations of Valley Bisa land. Local leaders used the crisis to solidify identities behind them through their interpretations of recent events, including suspect motives and offensive behavior of officials on their turf.



Most management assignments require much time in offices with writing and reviewing reports together with other administrative duties taking precedence over work outside. Consequently, contact with "beneficiaries" is often short, superficial, and spread over time. There is interpersonal distance and its intervals allow room for conniving, trickery, misinformation on the part of others (as well as among project staff) so that knowing different people is difficult. How can one get to know important others as well as cope with different ways of perceiving and working in the world?

Outsiders can learn only what others want them to know. Learning is a joint endeavor, built upon trust and reciprocity. There are no substitutes for the duration of exposure and mutual experiences over time.

Learning what and how to ask are culturally-loaded propositions. How a question is asked often determines how it is answered. From their previous engagements, rural residents often anticipate outsiders' questions and respond with "appropriate" and uncontroversial answers. How to move beyond these stereotyped exchanges to meaningful dialogue is a challenge.

I once listened to an insightful lecture by a management biologist explaining the territorial behavior (lek) of lechwe, a topic he had spent years studying for a thesis. When I asked him how local people perceived and acted with reference to this vulnerable behavior in one of their major prey species, he had never thought to ask. Yet local residents had reckoned in their own ways with this behavior and had not eliminated this species in the past. Local management schemes, including when, where, and under whose leadership their hunts took place were successful until undermined rather recently. The biologist didn't know how to frame the question in a way to elicit a meaningful answer (a difficult and nuanced proposition in any case) or perhaps to interpret the answer within a context that made sense or to employ it for subsequent management of that species.

5. You Won't Learn Everything in One Day

As I was nearing the end of my first year of fieldwork in 1967, I hoped to resolve a long list of gaps in my studies just prior to my departure to write the dissertation. Such pending deadlines are always loaded with an urgency and impatience that stems



from the sense that these information gaps are impossible to fill in from a distance. I was feeling such pressure when early one morning I found an elderly man weeding in his nearby fields. I had spent several days searching for him because I knew he could answer some of my outstanding questions. After the appropriate greetings and inquiries about health, I immediately began asking my questions. He politely took the time to answer two of my questions. While I was asking my third question, he saw my long list. He coughed politely, resumed his own tasks and dismissed me with, "Bwana, you can't understand everything in one day!" I got his message and it has been instructive ever since.

Dilemmas facing conservation today are exceptionally difficult and interminable. How is one to protect wildlife and habitats against the interests of various parties within and without while at the same time showing appropriate respect for local history, culture, social organization, livelihood practices and local concerns? It's a heady mix of unending challenges with no easy or school learned answers. We know that our continued existence on this planet and our interests in wildlife survival demands changes from us all. Further, we also know that northern institutional management and its "universal" sophistication have not worked everywhere. All policy makers, state officials and conservationists should engage in grappling with the messiness, difficulties, and specificities of shifting, absorbent, traditional knowledge while encouraging local creativity to sustain biodiversity and livable environments wherever they are found.

Even wildlife managers might one day find that while "antipoaching" units and force of arms might be necessary on occasion, they are neither sufficient nor a panacea for changing rural behaviors and attitudes in a sustainable direction.

I wish to thank Dr. Rolf Baldus for suggesting that I consider contributing to his review of CBNRM and that I reflect on my experiences and its lessons for rural development. I appreciate the close readings of an initial draft by Martha Marks and to Dr. Art Hoole for his perceptive comments.

Additional Recent References for Assessing the Welfare of Zambian GMA Residents

Simasiku, Phyllis, Hopeson I. Simwanza, Gelson Tembo, Sushenjit Bandyopadhyay & Jean-Michel Pavy. The Impact of Wildlife Management Policies on Communities and Conservation in Game Management Areas in Zambia: Message to Policy Makers Published by the Natural Resources Consultative Forum (with support from the Royal Danish Embassy, the Royal Norwegian Embassy, the United Nation Development Program, and the World Bank. (dated June 2008).

Sushenjit Bandyopadhyay and Gelson Tembo Household Welfare and Natural Resource Management around National Parks in Zambia. An Environment Department of the World Bank (Policy Research Working Paper 493) (dates May 2009).



Case Study 2 LESSONS LEARNT OF ZIMBABWE'S CAMPFIRE PROGRAMME by Vernon Booth

ACRONYMS

CDF	CAMPFIRE Development Fund
CSPs	CAMPFIRE Service Providers
DNPWLM	Department of National Parks & Wild Life Management
GoZ	Government of Zimbabwe
MAPS	WWF Multispecies Animal Production Systems
MLGRUD	Ministry of Local Government, Rural and Urban Development
NORAD	Norwegian Agency for Development Cooperation
NRM	Natural resource management
NRMPI	Natural Resource Management Programme Phase 1
PSIP	Public Sector Investment Programme
PTD	Participatory Technology Development
PWMA	Parks & Wildlife Management Authority
RDCs	Rural District Councils
SCI	Safari Club International
SO1	USAID Mission's Strategic Objective One
USAID	United States Agency for International Development
USF & WS	US Fish and Wildlife Service
WWF	World Wide Fund for Nature
ZimTrust	Zimbabwe Trust
CCG	CAMPFIRE Collaborative Group
CASS	Centre for Applied Social Sciences
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CA	CAMPFIRE Association
AA	Appropriate Authority

INTRODUCTION

The following summary provides an overview of the CAMPFIRE programme in Zimbabwe (Taylor, 2009). Thereafter, a number of lessons learnt from the implementation of CAMPFIRE are provided at the conclusion of this annex.

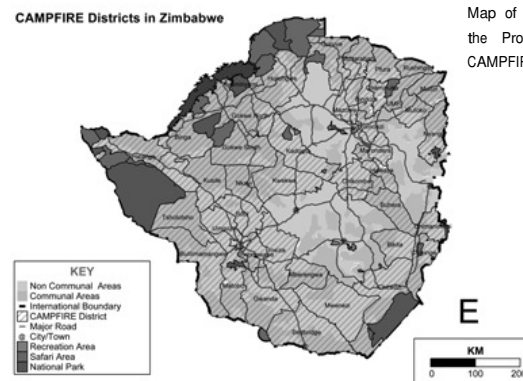
THE EXPERIENCE OF CAMPFIRE IN ZIMBABWE

Much of Zimbabwe is semi arid, with a low and variable rainfall making the country prone to drought. Land use varies from intensive crop production to extensive cattle and wildlife production along a rainfall-altitude gradient as reflected in the agro-ecological survey of the country (Vincent and Thomas 1960) which identifies Natural Regions IV and V as unsuited to rain fed agriculture, and best used for extensive rangeland production systems.

Some 50,000 km² of Zimbabwe or 13% of the country is devoted to conservation in the State protected Parks and Wild Life Estate (Fig.1). An equivalent area of 40-50,000 km² of communally occupied land is either adjacent to or near the Parks Estate where wildlife populations are relatively abundant, especially where human population density is low (<10 persons/ km²) and wildlife habitat (> 50% of land area) is intact (Taylor 1999). It is in these less developed, more remote areas that CAMPFIRE (Communal Areas Management Programme for Indigenous Resources) was initially implemented in the late 1980s.

CAMPFIRE was designed by the then Department of National Parks & Wild Life Management (DNPWLM, now the Parks & Wildlife Management Authority, PWMA) in the mid 1980s (Martin 1986) as a long-term programmatic approach to rural development that uses wildlife and other natural resources as a mechanism for promoting devolved rural institutions and improved governance and livelihoods (Child et al 2003). The cornerstone of CAMPFIRE is the devolution of rights to manage, use, dispose of, and benefit from natural resources.

CAMPFIRE Districts in Zimbabwe



Map of Zimbabwe showing the Protected Areas and CAMPFIRE Districts

As originally envisaged, CAMPFIRE was to focus on the conservation and exploitation of four natural resources, wildlife, forestry, grazing and water. However, because wildlife is able to provide direct and immediate tangible financial benefits, the initial success of the programme was premised on the use of large mammal wildlife resources, mostly through high value trophy hunting safaris and to a lesser extent through non-consumptive ecotourism. Wildlife has remained the main focus of CAMPFIRE although there have been attempts to diversify the programme to include timber and bamboo harvesting, honey and fruit production, fisheries, mopane caterpillars and the sale of non-renewable resources such as river sand for construction purposes.

The Parks & Wildlife Management Authority (PWMA) is the legally mandated authority responsible for wildlife resources in Zimbabwe. The 1975 Parks and Wild Life Act decentralized state authority, and conferred privileges on owners or occupiers of alienated land as custodians of wildlife, fish and plants (Government of Zimbabwe 1975). Land owners or occupiers were designated "appropriate authorities", giving them de facto responsibility for wildlife and making them the beneficiaries of sound wildlife conservation and use. After 1980, similar rights were extended to communal farmers through an amendment to the Act in 1981 which delegated Appropriate Authority (AA) to Rural District Councils (RDCs). In practical terms AA represents the decentralization of authority and control over wildlife only to RDCs (Muroombedi 2001).

FUNDING FOR CAMPFIRE

The early establishment of CAMPFIRE as a rural development programme was characterised by a relatively low level of external funding (Child et al 2003), and the DNPWLM had to rely on Government funding through a Public Sector Investment Programme (PSIP) to initiate CAMPFIRE. Furthermore a CAMPFIRE Agency under an appropriate Ministry was also planned, for which short-term donor funding would have been sought (Martin 1986).

Technical and other support was provided by a coalition of support agencies, initially the University of Zimbabwe's Centre for Applied Social Sciences (CASS), Zimbabwe Trust (ZimTrust) and the World Wide Fund for Nature (WWF) and subsequently others, notably the Ministry of Local Government, Rural and Urban

Development (MLGRUD). Under the leadership of DNPWLM and later, the CAMPFIRE Association, their inputs were coordinated through the establishment of the CAMPFIRE Collaborative Group (CCG) which was replaced by the CAMPFIRE Service Providers (CSPs) in 1994¹.

This support was further enhanced, notably for CASS and Zimtrust through funding provided by USAID Support to CAMPFIRE under NRMP I (1989 – 1994) whilst that of WWF came through the WWF Multispecies Animal Production Systems (MAPS) Project. The NRMP I project was "designed as a pilot initiative to test the CAMPFIRE hypothesis on a limited scale before committing more substantial USAID resources"². The total grant was USD\$7.6 million over 5 years and four districts in Matabeleland in northwest Zimbabwe, namely Binga, Bulalima-Mangwe, Hwange and Tsholotsho, were recipients of support. This included infrastructural development, capital equipment, and activities relating to wildlife management, institutional and community development including women, training and applied research.

NRMP I was generally viewed as successful and USAID expanded its support for CAMPFIRE under NRMP II (1994–2003). The USAID contribution to NRMP II was USD\$10.5 million of which USD\$16 million was bilateral funding and USD\$4.5 million regional funding. A 15% GoZ contribution in kind was estimated at USD\$9.4 million (Child et al 2003). The country level goal of NRMP II in Zimbabwe was to use Natural Resource Management (NRM) to develop economically sustainable communities on lands marginally suitable for agriculture. This project goal was subsequently amended in 1998, as the USAID Mission's Strategic Objective One (SO1) namely "strengthened NRM for the sustainable development of CAMPFIRE areas". Primary beneficiaries of CAMPFIRE have always been households at community (ward and village) level and were the intended ultimate beneficiaries of NRMP II. The CAMPFIRE Association (CA), RDCs, and CAMPFIRE Service Providers (CSPs) became the means for reaching these communities and as such, became direct and immediate beneficiaries of the project.

NRMP II supported CAMPFIRE in its totality, and wherever the programme was active. It also supported CAMPFIRE in diversifying NRM beyond wildlife utilisation to include non-consumptive eco-tourism ventures, timber and bamboo

harvesting, honey and fruit production, fisheries, mopane caterpillars and the sale of non-renewable resources such as river sand for construction purposes. A second related goal was multi-country regional cooperation in the promotion of NRM activities which would contribute also to the sustainable development of communities on lands marginally suitable for agriculture.

The Norwegian Agency for Development Cooperation (NORAD) also provided funding to WWF Zimbabwe through WWF Norway to support CAMPFIRE in two phases between 1994 and 2000. WWF's support to CAMPFIRE was demand driven by both CA and DNPWLM and the nature of this support was clearly articulated in strategic plans. Specifically, WWF was charged with developing local level natural resource management techniques and capacity.

- Phase I (1994–1998) included the development of natural resource management methodologies, using the concept and practice of Participatory Technology Development (PTD, Taylor and Bond, 1999) and the development of training materials based on these methodologies. The funding provided for this phase amounted to USD\$1,53,743.
- Phase II (1999–2000) focused on the delivery of training nationally and locally, using the training materials developed in Phase I. Some USD\$936,550 was made available for this work.

Other supporting funds of lesser amounts were also made available, including USD\$113,000 for a specific component of WWF's CAMPFIRE work, the development of quota setting methodologies, provided by the US Fish and Wildlife Service (USF & WS) through Safari Club International (SCI). Since 2003, CAMPFIRE has received approximately USD\$100,000 annually from WWF, SCI and the Ford and Kellogg Foundations.

Donor investments over nearly 15 years is therefore substantial at more than USD\$35 million.

SUMMARY DESCRIPTION OF PROGRAMME ACTIVITY

CAMPFIRE was originally designed by the DNPWLM as a long-term programme to address those problems arising from communal ownership, development,



management and sustainable utilisation of natural resources (namely forestry, grazing, water and wildlife) in the Communal Areas of Zimbabwe. The programme focuses on the remote communal lands in Natural Regions III, IV and V around the periphery of the country. Community participation would be voluntary, but custody and responsibility for NRM would be placed with participating communities. This was to be achieved through group ownership with defined rights of access to natural resources and appropriate institutions for the legitimate management, use and benefit of these resources (Martin 1986).

In the process of implementation, three strongly inter-linked principles embedded in the original design have contributed significantly to the evolution of CAMPFIRE policy and practice (Jones and Murphree 2001):

1 Economic benefit

Economically competitive forms of land use have motivated the sustainable use of wildlife outside of formally protected areas in Zimbabwe. The wildlife policy in the 1960s moved from an earlier protectionist philosophy to one promoting the high economic and financial value of wildlife, a key incentive for its sustainable management. The underlying assumption was that economics ultimately determine decisions regarding the allocation of land and the resources thereon. The early success of this utilitarian approach to wildlife on alienated land in the commercial agricultural sector provided compelling arguments for its wider application in the communal sector of the country, particularly after 1980. In the context of rural development and CAMPFIRE, placing wildlife in the realm of economics and land use, rather than conservation provided an important opportunity to complement conventional and subsistence agricultural practice in the communal lands of the country (Jones and Murphree 2001).

2 Devolution

This wildlife policy shift, formalized in the 1975 Parks and Wild Life Act, and amended in 1981, decentralized state authority and conferred certain privileges on occupiers of land. Such devolution, coupled with alternative economic opportunities and incentives for rural development, was intended, inter alia, to better serve wildlife conservation, given the inadequate government resources to do so. It also recognised that land occupiers are the primary determinants of habitat and wildlife

status. Further and importantly, CAMPFIRE was viewed as a means of improving rural resource governance through local devolution (Child et al 2003).

It is devolved responsibility initially, was granted to 10 RDCs in 1989 and 1990, recognising that long-term success depended on further devolution to sub-district levels, even to a community level institution. In the absence of any legal persona below the level of RDC, however, obliged DNPWLM to decentralise administrative authority and legal rights to wildlife to RDCs, but on condition that rights and benefits were to be further devolved to what were termed "producer communities".

3 Collective proprietorship

Whilst the transfer of proprietorial rights, together with accompanying financial incentives, was highly successful on commercial farmland, similar replication in communal lands faced numerous legal and institutional impediments. What was required was a communal property regime behaving as a proprietorship unit over land and resources. Such a regime or unit should comprise a defined group collectively managing and exploiting common property resources within a defined jurisdiction (Jones and Murphree 2001).

In the event, Ward level producer communities emerged through the establishment of Ward Wildlife Management Committees (WVMCs) or Ward Wildlife Committees (WWCs). These village-elected committees were formally constituted with a membership comprising a Chairperson, Secretary and Treasurer and others, with or without a specific portfolio or responsibility. The Chairperson represented his/her Ward on the District Wildlife (or Natural Resources) Committee, a sub-committee of the District Council. Although in effect, these new committees are sub-committees of the local government units (Murombedzi 2001), one of a number of constraints or difficulties faced was the perception of such committees as "parallel" institutions to WADCOs and VIDCOs, and thus potentially competitive or even subversive.

³ In Zimbabwe, Provinces are made up of Districts comprised of Wards. Wards in turn comprise a number of Villages. These spatially and physically defined groupings also reflect the lower level administrative structures of the country, namely WADCOs (Ward Development Committees) and VIDCOs (Village Development Committees)

⁴ Members of the CCG (subsequently, Service Providers and mostly NGO), worked primarily through the WWCs and WVMCs

of such leases, such as financial structure, duration and location are determined primarily by the RDC which negotiates these conditions with the safari operator.

The number and types of leases vary according to the abundance of wildlife resources, the quality and diversity of scenic and/or cultural landscapes and market appeal. Most of the primary wildlife producing districts, however, have chosen to lease internationally marketed sport hunting rights to private sector partners because this has been the highest valued use to date (Cumming 1989, Bond 1994, Taylor 1994a). Lessees pay all their fees to the RDC, but the level of involvement of sub-district community representatives in the lease allocation process, whilst variable between districts, generally has been minimal (Bond 2001, Jones and Murphree 2001).

The gross wildlife revenue earned is allocated to district council levies, district wildlife management activities and to wildlife producer communities as represented by wards. Whilst the breadth and depth of wildlife management activities varies between districts, most have a small core team of personnel who undertake law enforcement, problem animal management and wildlife monitoring. It is that revenue allocated to communities through Ward Wildlife Management Committees which is intended to provide the financial incentive for households to participate in the collective management of wildlife (Bond 2001). Wards choose to allocate revenue to management (salaries for resource monitors, allowances for committee members, fence repairs and maintenance), projects (grinding mills, schools, and clinics) and household dividends (uncommonly cash).

RESULTS

CAMPFIRE aimed to improve the conservation and sustainable use of natural resources in the communal lands, and through this improve the livelihoods of the communities residing in these areas. By default, the use of wildlife has been the conduit to drive this process, and the results of this can be summarized as follows:

1 Revenue earned at district level from wildlife 1989-2001

Between 1989 and 2001 the revenue earned by Rural District Councils with Appropriate Authority exceeded US\$10 million. Some 90% of this revenue was earned from the lease of sport hunting rights to commercial safari operators (Table 1).

In 1989 two RDCs in the Zambezi valley, Guruve and Nyaminyami, were granted AA status and commenced earning revenue through the marketing of trophy hunting quotas to an international safari hunting clientele. This was rapidly followed by a further seven districts wanting to join the programme and requesting AA status. By 1991 10 RDCs had acquired Appropriate Authority and following major donor inputs after 1996 for building or strengthening institutional capacity and NRM micro-project development, CAMPFIRE had grown to include 37 RDCs with AA status by 2001. Many of the latter, however, were not traditional wildlife producing districts (Table 1). Of these, 19 or 51% could be considered as fully participating, i.e. producer districts generating revenues for communities through sustainable natural resource management activities and receiving benefits in terms of funded projects, training and membership of the Association. Over 70% of wards (171) and villages (1,117) in these 19 districts could be considered also as fully participating producer communities.

Table 1: Number of Districts and fully participating communities in CAMPFIRE in 2001

No Districts	Full participation	%	No Wards	Full participation	%	No Villages	Full participation	%
37	19	51	271	194	72	1217	883	73

Source: CAMPFIRE Association

The CAMPFIRE Association was formed in 1991 to lobby for, and promote the role of communal land wildlife producers. This gave CAMPFIRE an important level of political legitimacy and an ability to play a proactive advocacy role, locally and internationally. Its membership, however, has remained the RDCs and not the true wildlife producer communities at a sub-district level.

THE CAMPFIRE MODEL

In practice sport hunting and ecotourism have provided the primary economic and financial basis for the implementation of CAMPFIRE over the period 1989-2001. Although there is considerable biophysical and socio-economic variability between RDCs with Appropriate Authority, Bond (2001) describes a general model for the income or revenue earned from the use of wildlife and the subsequent allocation of this revenue. Consumptive (sport hunting) and/or non-consumptive (ecotourism) rights to wildlife and wild land are leased to private sector operators by the RDC. The conditions



The remaining revenue came from the lease of tourism rights (1%), ivory sales and sale of hides (6%) and other minor resources such as crocodile and ostrich eggs and tallow (1%).

Table 2: Revenue earned by RDCs with Appropriate Authority for wildlife 1989 – 2001

1989-2001	US\$	Average income/year	% of total by activity
Sport hunting	US\$18,152,074	US\$1,396,313	90
Tourism	US\$464,915	US\$35,762	2
Sale of ivory & hides	US\$1,165,706	US\$89,669	6
Other	US\$507,090	US\$39,006	2
Total income	US\$20,289,784	US\$1,560,752	100

Source: Bond (1999, 2001) & CAMPFIRE Monitoring & Evaluation Database, WWF SARPO Harare

Annual income at the commencement of the programme in 1989 was ~US\$350,000 when only two Appropriate Authority RDCs were in place and operational, and this increased to over ~US\$10 million in 2001 by which time there were 16 wildlife producing RDCs with Appropriate Authority. Over the 13 years, the average total income was ~US\$1.5 million which translates to approximately ~US\$97,547 per RDC (N=16).

2 Allocation of revenue earned from wildlife 1989-2001

Bond (2001) defines three categories for the allocation of revenue earned from wildlife by RDCs. Councils with Appropriate Authority are not legally obliged to devolve revenue to sub-district levels but are encouraged to do so through a set of guidelines originally developed by DNPWLM in 1991. These Guidelines for CAMPFIRE were the subject of on-going debate (Jones and Murphree 2001) until they were endorsed by the CAMPFIRE Association in its Financial Management Manual (Anon. 2003).

These seek to ensure that producer communities are the primary beneficiaries of the revenue earned and make the following recommendations:

- At least 50% of gross wildlife revenue should be devolved to ward level;
- Up to 35% can be retained for wildlife management purposes at RDC level;
- No more than 15% retained as a council levy.



Apart from the council levy, the allocation of revenue over the past 13 years has been less than satisfactory in terms of the revenue guidelines (Table 3). Even wildlife rich and well-endowed districts have been unable to devolve the recommended 50% of revenue earned to wards and households and on average only 46% has been disbursed to community level. Across the 16 RDC's this translates to approximately US\$47,549/year. Significantly, some 14% (US\$3 million) remained unallocated over the 13 years, and generally, is assumed to have been committed to activities not related to wildlife and CAMPFIRE (Bond 2001).

Table 3: Allocation of revenue earned from wildlife by RDCs 1989-2001

1989-2001	US\$	Average income/year	% of total by activity
Disbursed to communities	US\$9,890,392	US\$760,799	46
District level wildlife management	US\$4,080,194	US\$313,861	20
Council levy	US\$2,506,885	US\$192,837	15
Other uses	US\$680,491	US\$52,345	5
Not allocated	US\$3,125,382	US\$240,414	14

Source: Bond (2001) & CAMPFIRE Monitoring & Evaluation Database, WWF SARPO Harare

Importantly, whilst there has been diversification beyond wildlife into ecotourism and other NR products, a number of RDCs have treated such income from these activities as General Revenue and not CAMPFIRE income. A study commissioned by the CA (PwC 2001) suggests that these income generating activities may have provided as much as 30% more revenue than is reflected in the CAMPFIRE accounts (Child et al 2003). Furthermore, most if not all of this income, fails to reach communities.

3 Household benefits

The total number of households receiving wildlife revenue increased from 7,861 in 1989 to 98,964 in 1995, thereafter declining to 76,863 by 2001. The financial benefit per household (ward dividend/number of households, Bond 2001) between 1989 and 2001 is low. In real terms the median benefit per household declined from US\$19.60 in 1989⁵ to US\$3.87 in 2001. In part this has been due to the decreasing wildlife production potential in the growing number of districts joining the programme. Overall, but excluding 1989, the annual financial benefit for 50% of households has amounted to US\$4.57 or less during the life of the programme.

⁵ The 1989 value is biased upwards because there were only 2 districts, Nyaminyami & Guru'e, with Appropriate Authority

this shift may be linked to the growing acceptance and adoption of a participatory approach to quota setting and monitoring (Taylor, 2001), successfully initiated in CAMPFIRE areas. This methodology emphasises the adaptive management of quotas in response to indices of animal abundance, trophy quality, community monitoring, illegal offences and safari operator "catch effort".

3 Maintenance of wild land and wildlife habitat

No simple uniform or systematic approach to measuring wildlife areas over all CAMPFIRE districts has been undertaken and that this is a serious omission (Child et al 2003). However, as an initial assessment of the likely extent of wild land and habitat within CAMPFIRE areas, Taylor (1999) used wildlife producing wards⁶ as a proxy for this land, recognising that such wards comprised a mosaic of wild and settled land. Wildlife producer wards on average made up 36% of the total number of wards in CAMPFIRE districts, with their land area of 39,580 km² constituting 55% of the total area under the programme.

For 17 primary wildlife districts the amount of wild land varied from less than 500 to over 5,000 km² with an average size of 3,300 km². Of these, three districts had wild land in excess of 90% of the district area, six had 50-70% wild land and in 3 districts only, less than 35% of the district constituted wild land.

The availability of wild land is negatively correlated with human population density (p<0.01), with the maintenance of wild land (> 50% of area) more likely under lower rather than higher population densities (<10 persons/ km², Taylor 1995, 1999). At a coarse scale of resolution, these results suggest that wild land has been maintained in an intact state. This also has implications for potential household earnings from wildlife with those areas sparsely populated and relatively high wildlife densities standing to benefit more (Bond 2001, Murombedzi 2001).

The loss of wild land and habitat over 8 years between 1989 and 1997 in three wards of three districts in the Zambezi valley was minimal amounting overall to no more than 1% of a total 1,650 km². The major threat was identified as population growth and demand for more agricultural land (Conybeare 1998). In contrast, Dunham et al (2003) examined more critically the area and quality of wildlife habitat in selected CAMPFIRE areas using a combination of aerial photography

⁶ Producer wards are used as a proxy for the area of wild land

Following the commencement of CAMPFIRE in 1989, and as further RDCs were granted Appropriate Authority, increasingly more of the key wildlife districts were surveyed and censused for large mammals (Taylor and Mackie, 1997). Censuses have either been part of larger country-wide surveys or of specific CAMPFIRE areas and not all districts have been surveyed on a regular basis over the 14 year period (1988-2001). Table 4 summarises the elephant and buffalo counts for eight of the 17 primary wildlife producing districts. As a general observation elephant numbers have increased from a minimum of 4,181 in 1989 to a maximum of 10,659 elephants in 2001 in CAMPFIRE areas and buffalo numbers are either stable or have declined slightly over the past 14 years.

Table 4: Elephant and buffalo census results for CAMPFIRE 1988-2001

	Year	1988	1989	1991	1992	1993	1994	1995	1996	1997	1998	1999	2001
Elephant	Number	4250	4181	5261	4824	6127	NS	10791	7270	6306	6681	10659	12707
	Density	0.45	0.34	0.43	0.30	0.31	0.28	0.61	0.32	0.31	0.38	0.68	0.77
	No districts	3	4	5	6	7	5	8	8	7	7	7	8
Buffalo	Number	18177	15752	8758	7695	11475	NS	15824	5366	14033	8779	12262	14343
	Density	1.75	1.28	1.04	0.63	0.92	NS	0.96	0.45	1.13	0.70	1.0	1.21
	No districts	3	4	3	4	5	2	5	4	4	4	5	5

Source: Reworked from Taylor and Mackie (1997) & CAMPFIRE Monitoring & Evaluation Database, WWF SARPO Harare. NS = not surveyed

2 Quota offtakes and trophy quality

The value of big game trophies has been maintained in CAMPFIRE areas suggesting that trophy hunting and monitoring systems are effective (Child et al 2003). A review of quotas, offtake, trophy quality and "catch effort" across four key species (elephant, buffalo, lion and leopard), however, indicate that whilst national quotas and actual offtakes for elephant and buffalo have been increasing between 1991-2001 trophy quality for these two species has been declining (Grobbeelaar and Masulani, 2003). For lion and leopard, offtakes have either declined or are stable, whilst trophy quality is stable for leopard and increasing for lion. There is also a strong correlation between increasing quotas, declining trophy quality and increased "catch effort".

There has been a noticeable shift in DNPWLM quota setting policy in the latter half of the 1990s. Whereas quotas were set to maximise returns prior to 1996, thereafter there was a switch in emphasis to more sustainable trophy quality, which resulted in a reduction of most quotas. Although attribution of causality is difficult,



and remotely sensed imagery. Notwithstanding the problems associated with using and comparing different methods of mapping, it was established for three Zambezi Valley districts that the percentage of habitat destroyed by settlement/cultivation had increased markedly between 1981 and 1999. The percentage of good quality habitat declined by half in Binga District and almost totally so in North Gokwe. Only Nyaminyami District retained much of its original natural habitat. Natural habitat in both Binga and Gokwe⁷ was < 50% coverage in the baseline year compared to Nyaminyami which was > 50%.

GOVERNANCE

From the inception of CAMPFIRE to the mid-90s, the amount and proportion of revenues devolved to producer communities increased rapidly, providing the primary impetus for wildlife conservation and for improvements in community institutional development and governance. Subsequently, the rate of devolution levelled off and after 2000, the process reversed itself (Child et al 2003). By 2001, only 38% of revenue was being returned to producer communities with 0% being used for CAMPFIRE management with over 40% retained by RDCs for general purposes, compared to the guideline upper limit of 15%.

Nevertheless, in 2003 the concept and level of devolution in many districts was still strong. This is confirmed by Zimfrust (2003), which reported the strong correlation between fiscal devolution and institutional development. Rough NRMP II investments, such as the CAMPFIRE Development Fund (CDF) and the establishment of community Trusts, these principles are being adopted in most projects as the norm rather than as previously contentious issues. There still remains, however, a high level of taxation imposed on producer communities by RDCs through their various levies. More recently, and in response to these adverse and imposed conditions, some wards and village collectives, notably in Chiredzi, Chipinge, Guru'e⁸ and Nyanga⁹ Districts, are beginning to negotiate directly with safari operators and other private sector partners, direct payments of hunting and ecotourism revenues. Some RDCs, especially their technical staff, tend to support such advance, even if only implicitly, recognising their own limitations and inability to overcome this problem.

⁷ Note that habitat assessment by Dunham et al (2003) was for all of North Gokwe District whilst that of Conybeare (1998) was confined to the Wildlife Corridor, an area set aside by North Gokwe residents for wildlife

⁸ See Ingwe Safaris 2005 Year End Report to Guru'e Rural District Council

⁹ See Minutes of the Gairesi Development Trust & the Nyanga Downs Fly Fishing Club, 2005/06

One of the more notable achievements of CAMPFIRE has been the strengthening of institutional development at the producer community level (Child et al 2003). The use of wildlife dividends appears to be decided democratically, that people retain and sometimes (uncommonly, Bond 2001, see above) use their right to have household cash benefits and that many projects are implemented properly. Finances are reasonably well managed in a transparent and peer reviewed manner, thus preventing widespread or large-scale misuse.

In terms of good governance, in excess of 100 democratically elected and constituted village and ward CAMPFIRE committees exist in 3 districts. These structures provide for a high level of community participation and decision-making with a transparent flow of information relating to key issues, planning and projects. These committees have been equipped with basic organizational skills including holding meetings, minute taking, book-keeping, and the fundamentals of project and financial management. In the primary wildlife producing districts, the community leadership and locally employed NR monitors are able to organize and implement a number of wildlife management skills including counting wildlife, setting quotas, monitoring hunting, marketing wildlife and undertaking problem animal mitigation measures. Fire management has been implemented in the four districts of Chipinge, Chiredzi, Gokwe North and Guruve. Illegal activity is also monitored and penalties imposed on offenders. However, the basis for such achievement is inextricably linked to the incentive to do so which in turn, is directly related to the strength of the associated benefit.

PERFORMANCE INDICATORS

CAMPFIRE (and its equivalents elsewhere in southern Africa), confirms the concept that the devolution of responsibility and accountability for natural resource management can be highly effective for the collective and participatory management of such resources. Such devolution also leads to improved local institutions and governance. However, it is pertinent to examine also, the assumptions or external factors underlying the success or otherwise of CAMPFIRE.

Based on the "Monitoring and Evaluation Plan for CAMPFIRE" (Wright 1997), four areas of assumption and their indicators were identified as necessary for the successful implementation of CAMPFIRE. These are government policy, markets

for natural resources, climate and macro-economic performance (Table 5). A review of these assumptions indicates that at least three are presently unfavourable for CAMPFIRE (WWF SARPO 2003).

Firstly, the commitment of Government to creating and sustaining an enabling policy framework for devolved natural resource management has not been achieved through legislative changes. More recent policy changes, especially those from PWMA indicate a re-centralisation of wildlife management¹⁰. Most NR and land legislation still continues to ensure state control of resources and land. Furthermore, under an adverse macro-economic environment, PWMA and other NR agency budgets have declined dramatically in recent years.

Secondly, although the markets for wildlife products appear generally robust, particularly on State and Communal Land, a collapse of the wildlife industry on former large-scale commercial farmland, although not yet impacting significantly on CAMPFIRE, does have implications for both State and communal areas as all three are linked, each adding value to the other. National hunting revenues peaked at US\$11m per annum in 1998 but have since declined to US\$16m in 2001 (Booth 2002). This is also reflected in the number of sport hunting days sold, declining from more than 10,000 in the late 1990s to 18,000 in 2001.

Thirdly and importantly, the macro-economic indicators examined all point to declining economic performance. The increase in unemployment and the decline in real wages act to place increasing pressure on land and other natural resources in the communal lands of the country.

Direct and causal links between rainfall and CAMPFIRE are difficult to establish. The long-term impacts of cumulative and variable rainfall deficits (> 1,000 mm by 2001) experienced over the past 20-30 years remain difficult to predict. It is climatic variability however, that provides one of the strongest justifications for adopting wildlife, and other NR-based land uses as an alternative and sustainable strategy for social, economic and ecological betterment (Taylor, 2009).

LESSONS LEARNT

1 Decentralise to the lowest level

The fact that RDCs were awarded AA status instead of to the lowest possible level was recognised early in the process as being one of the most fundamental problems inhibiting the implementation of CAMPFIRE. Over the last 30 years, the promoters of CAMPFIRE have tried to work around this problem with little success, leading to the withdrawal of significant donor funding and broad scale technical support.

If the principles of CAMPFIRE are to be promoted further as originally envisaged, specifically meaningful devolution, as opposed to re-centralisation of authority, of natural resource production systems to producer communities then CAMPFIRE needs to emulate more recent experiences in the region. This includes the need to legislate for appropriate authority status and land rights at sub-district units of decision-making, preferably at the level of the village and even to family level. Promotion of local level proprietorship, including the establishment of community trusts and/or cooperatives must continue. Whilst capacity is not a limiting factor, long-term leadership must be strengthened.

2 Improve the accountability of RDCs

RDCs still retain excessive control, especially regarding revenue retention, resulting in the intended primary beneficiaries being severely disadvantaged. Given the poor macro-economic indicators and without the appropriate incentives, these producer communities are likely to continue or return to former unsustainable practices on marginal agricultural land, confirming the analyses of Cumming and Lynam (1997), Conybeare (1998) and Dunham et al (2003) reported above. This is compounded by the CA still precluding producer community membership and limiting such membership to RDCs, thereby continuing to avoid addressing policy issues such as devolution of AA to sub district level.

3 Transition from "traditional" conservation to "modern" conservation practices

A great deal has been written regarding the loss of traditional conservation practices following the imposition of colonial wildlife management systems. CAMPFIRE provided the opportunity for such systems to be resuscitated however the political and policy environment has stilled this, especially in the absence of land tenure systems at the communal level. Conflicts have arisen where homogenous



communities at a village level wanting to take better control of NRM have clashed with RDCs e.g. the Mahenya community in Chipinge RDC; Kanyurira Ward in Guruve RDC and Chikwarakwara Village in Bietbridge RDC.

Both the 'modern' and 'traditional' authorities need to agree on resource boundaries and rights of access to land if there is discord between them. Community-based land and resource management cannot function efficiently if democratic governance does not, whenever appropriate, recognise traditional values. This is most clearly seen in regard to migration of people between communal areas. Both formal and informal systems directly affect rights to participate in communally defined resource management and it is this obscurity of management boundaries, in regard to rights of access to communal resources and their benefit flows, makes CAMPFIRE a complex programme to implement.

4 Diversification of NRM

CAMPFIRE as a movement grew rapidly when significant donor funds became available through the CAMPFIRE Development Fund resulting in a wide variety of local 'community' projects being sponsored. However, once these funds were exhausted, the enthusiasm to continue supporting the CAMPFIRE philosophy waned, leaving behind a few core areas that could continue to exploit the sport hunting potential of the large wildlife populations. By in large, these operations have been financially successful, however virtually no RDC or localised community has taken the initiative to "grow" this business by developing wildlife based land use systems at the communal level, mostly because of the inappropriate land tenure systems at this level. Therefore, although CAMPFIRE has been relatively successful in securing habitat for elephant and buffalo, it has failed to secure areas for other wildlife.

5 Requirement for core technical support

CAMPFIRE exploded as a means to promote community-based conservation when it was first promoted. Driving this process was a dedicated core of individual ecologists, sociologists and economists that at the time had considerable political and institutional support throughout the country. This core of "service providers" was free to try a variety of approaches to advance CAMPFIRE, and in the process raised the expectations of many stakeholders, including those from outside of

Zimbabwe. However, the pace of CAMPFIRE obscured the early signs that in its present form it was not able to deliver as a result of not being structured correctly at the institutional level, and was unlikely to meet all the expectations. It became clear once the level of net dividends to communities became more apparent, together with the associated costs of the implementing the programme.

Critically the programme lost many of its early promoters who could have taken CAMPFIRE to the next stage and as such it was never able to develop new paradigms to devolve access rights to individual communities. Communal people have had neither the authority, the motivation, nor the technical training to establish new institutions for them, although Child et al (2003) conclude that the greatest contribution of CAMPFIRE has been the lesson that fiscal devolution leads to improved rural democratisation, governance and NR management. The lessons learnt thus far supports this conclusion, but CAMPFIRE is still constrained by a number of fundamental issues, mostly in the policy arena. Where devolution to beyond an RDC has been successful, there have been promising results, but even these fall short of empowering an individual or group of individuals in a community environment from developing sustainable NRM initiatives. Whilst communities are able to manage funds, implement projects and contribute to wildlife management, appropriate and strategic interventions by way of technical advice and guidance are still required. Nonetheless the recent acceptance and implementation of direct payments to communities is probably the most significant development since 2000. It at this has happened can be attributed to CAMPFIRE enabling communities to maximize their roles within the existing set of rules, and by so doing, allowing these rules to be challenged.

Table 5: Assumptions and indicators for CAMPFIRE (Modified from WWF SARPO 2003)

Assumption	Area of indicator	Indicator	Comment
1. Continued Government commitment to devolve CBNRM to local levels	Changes in policies for wildlife, forestry and other NRs DNPWLMPWMA have personnel and other resources for their CAMPFIRE Projects	- Wildlife policy & legislation - Forestry policy & legislation - Land policy & legislation - DNPWLMPWMA real budget (US\$)	No substantive revision of NR legislation or defined legal framework for devolved NRM in communal areas. Policy remains fragmented and largely centrally controlled. DNPWLMPWMA budgets reduced from c. \$200M ¹ to c. \$10M ² over past 20 years ³
2. Favourable market environment for CAMPFIRE products & for services exist &/or maintained	Demand for CAMPFIRE products and services maintained / expanded	- The total number of days of sport hunting per annum. - The gross value of sport hunting per annum. - The trophy fees paid for key species at the Zambezi Valley Hudson Huts	Increasing number of tourists, including sport hunters and associated revenue declined dramatically with land reform-related political instability. Declines, followed by an increase since 2001 in trophy fees, requires further analysis ⁴
3. No extreme climatic conditions	Frequency and distribution of droughts and other extreme climatic events	- Mean annual rainfall	No clear links between 0 years of below (5 drought years) and 5 years above average rainfall (3 flood years) and CAMPFIRE performance & for land use change. Nevertheless, food shortages are common in most CAMPFIRE districts on an annual basis
4. Favourable macro-economic environment prevails	Macro-economic performance maintained or increased	- Changes in Gross Domestic Product (1990 - 2001). - Changes in per capita gross domestic product (1990 - 2001). - Z\$ US\$ exchange rate (1990 - 2001). - % of total population in formal employment (1990 - 2001). - Real wages (1990 - 2001)	GDP shrank from \$8.4m in 1996 to \$3.3m in 2001 with GDP/capita constant from 1991 to 1997 at c. \$700. By 2001 GDP/capita had declined to c. \$238 Between 1990 and 1997 Z\$US\$ devolved from ZW\$2.47 to ZW\$12.44 and to ZW\$55 in 2001 when it was fixed at 1:1 % of total population in formal employment declined from 14% in 1980 to < 9% by 2001 with real wages < 50% paid in 1980

¹ See Woods (1991) and Rukuni (1994)
² See Cumming, Martin & Taylor (1981) and Cumming and Jones (2005)
³ See Booth (2002)

REFERENCES

Anon. (2003) CAMPFIRE Revenue Manual. CAMPFIRE Association and WWF SARPO, Harare.
 Blanc, JJ, Barnes, RFW, Craig, GC, Douglas-Hamilton I, Dublin, HT, Hart, JA and Thouless, CR (2005) Changes in elephant numbers in major savanna populations in eastern and southern Africa. *Pachyderm* 38, 19-28.
 Bond, I (1994) The importance of sport-hunted African elephants to CAMPFIRE in Zimbabwe. *TRAFFIC Bulletin* 14, 117-119.
 Bond, I (2001) CAMPFIRE and the incentives for institutional change. In: *African wildlife and livelihoods: The promise and performance of community conservation*. (Eds. D Hulme and M Murphree). James Currey, Oxford.
 Booth, V (2002) Analysis of Wildlife Markets (Sport Hunting and Tourism). Unpublished Report. WWF SARPO, Harare.
 Child, B, Jones B, Mazambani, D, Mlalazi, A and Moinuddin, H. (2003). Final evaluation report: Zimbabwe Natural Resources Management Programme-USAID/Zimbabwe Strategic Objective No. 1. CAMPFIRE Communal Areas Management for Indigenous Resources. Unpublished Report, USAID, Harare.
 Conybeare, A (1998) Assessment of habitat maintenance, diversity and productivity under communal management. Unpublished Report. WWF Resource Management Support to CAMPFIRE Project. WWF SARPO, Harare.
 Cumming, DHM (1989) Commercial and Safari Hunting in Zimbabwe. In: *Wildlife Production Systems: Economic Utilisation of Wild Ungulates*. (Eds. RJ Hudson, KR Drew and LM Baskin). Cambridge University Press, Cambridge.
 Cumming, DHM and Lynam, TJP (1997) Landuse Changes, Wildlife Conservation and Use and the Sustainability of Agro-Ecosystems in the Zambezi Valley. Final Technical Report, Volume 1. WWF SARPO, Harare.
 Dunham, KM, Davies, C and Muhwandagara, K (2003). Area and quality of wildlife habitat in selected CAMPFIRE districts. Report for the WWF MAPS-NRMP II Project. WWF SARPO, Harare.
 Government of Zimbabwe (1975) Parks and Wild Life Act (Amended 1982). Government Printer, Harare.
 Grobbelaar, C and Masulani, R (2003) Review of off take quotas, trophy quality and "catch effort" across the four main wildlife species, elephant, buffalo, lion and leopard. Unpublished Report, WWF SARPO, Harare.
 Jones, B and Murphree, M (2001) The Evolution of Policy on Community Conservation in Namibia and Zimbabwe. In: *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation* (Eds. D Hulme and M Murphree). James Currey, Oxford.
 Martin, RB (1986) Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). Revised Version. Department of National Parks & Wild Life Management, Harare.
 Murombedzi JC (2001) Committees, Rights, Costs and Benefits: Natural Resource Stewardship and Community Benefits in Zimbabwe's CAMPFIRE Programme. In: *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation* (Eds. D Hulme and M Murphree). James Currey, Oxford.
 Price Waterhouse (1996) Elephant census in Zimbabwe: An analysis and review 1980-1995. Price Waterhouse, Harare.
 PwC (2001) CAMPFIRE Revenues, Draft Report. Price Waterhouse Coopers, Harare.
 Rukuni, M (1994) Report of the Commission of Enquiry into Appropriate Agricultural Land Tenure Systems. Volume 2: Technical Reports. Government Printer, Harare.
 Taylor RD and Cumming DHM (1993) Elephant management in southern Africa. In: *Responsible Wildlife Resource Management*. Conference Proceedings: European Bureau for Conservation and Development, Brussels.
 Taylor, RD (1994a) Elephant Management in Nyaminyami District, Zimbabwe: Turning a Liability into an Asset. In: *Elephants and Whales: Resources for Whom?* (Eds. MMR Freeman and UP Kreuter). Gordon and Breach, Basel.
 Taylor, RD (1995) Consultancy to assess the potential for community management of wildlife resources in the Lunda-Mkwambi Game Control Area adjacent to the south eastern border of the Ruaha National Park, Tanzania. Unpublished Report. British Development Division in Eastern Africa, Overseas Development Administration.
 Taylor, RD (1999). Wilderness and the CAMPFIRE Programme: The value of wildlands and wildlife to local communities in Zimbabwe. In: *Proceedings of the Wilderness Management Symposium, Waterberg Plateau Park, Namibia* (Ed. TG Cooper).
 Taylor, RD (2009) Community-based natural resource management in Zimbabwe: the experience of CAMPFIRE. *Biodivers Conserv* (2009) 18:2563-2583.

Taylor, RD and Bond, I (1999) Participatory technology development for community-based wildlife management in Zimbabwe: The WWF Support to CAMPFIRE Project. In: *Personal, Societal and Ecological Values of Wilderness*. Proceedings 6th World Wilderness Congress, Bangalore.
 Taylor, RD and Mackie, CS (1997) Aerial census results for elephant and buffalo in selected CAMPFIRE areas. CAMPFIRE Association Publication Series 4, 4-11.
 Vincent, V and Thomas, RG (1960) An Agricultural Survey of Southern Rhodesia. Part I: Agro-Ecological Survey. Government Printer, Salisbury.
 Woods, J (1994) CAMPFIRE: The Legal Issues. Unpublished Report. DNPWL, Harare.
 Wright, A (1997) Monitoring and Evaluation Plan for CAMPFIRE. Report of the CCG Monitoring and Evaluation Sub-Committee. CAMPFIRE Collaborative Group, Harare.
 WWF SARPO (2003) CAMPFIRE Monitoring and Evaluation Data 2001. Unpublished report compiled by MA Khumalo, WWF SARPO, Harare.
 WWF SARPO (2003) Quantifying the Assumptions for CAMPFIRE. Unpublished Report. WWF SARPO, Harare.
 Zimbabwe Trust (2003) Process oriented monitoring system (POMS) evaluation of select sub-district CAMPFIRE institutions. Unpublished Report prepared for WWF SARPO by ZimTrust and compiled by S Matanhere. WWF SARPO, Harare.



- 1896 □ e German Imperial Governor Hermann von Wissmann creates the □rst non-hunting reserve for the preservation of wildlife, which later develops to the "Selous Game Reserve". People can continue to settle and farm there.
- 1911 Astonishingly modern wildlife legislation is enacted before and around the turn of the century, culminating in the Wildlife Act of 1911. □ e colonial administration does not restrict traditional hunting much and people continue to settle and farm in the game reserves.
- 19□0 □ e changes a□er the First World War when traditional hunting is increasingly restricted by legislation and people are translocated from newly established game reserves and national parks. Legal conditions for hunting like e.g. the purchase of a licence and the ownership of a modern □arm exclude the vast majority of the rural population from wildlife utilisation.
- 1964 Independence does not have any impact on the continuation of the wildlife policy. □ e establishment of additional National Parks and Game Reserves increases the protected area network, leads to further displacements of rural communities and reduces their access to natural resources
- 1974 A new Wildlife Act is passed which has many of the protective and "fortress conservation" features of the former colonial legislation.
- 1978 A deep economic crisis, increasing Governance problems and a lack of qualified sta□ lead to major poaching.
- 1986–1989 Peak poaching period in Tanzania; elephant populations in the Selous Game Reserve have been reduced from more than 100,000 in the 1970s down to less than 30,000, black rhino population almost extinct.
- 1987 □ e Selous Conservation Program (SCP) is initiated at the request of the Tanzanian government as a joint Tanzanian-German project under o□cial development cooperation. □ e SCP program pioneers the community-based conservation approach within Tanzania. Goals: strengthen and rehabilitate the management of the Selous Game Reserve and signi□cantly reduce con□icts between SGR and

the local population by promoting sustainable wildlife use as a vehicle for rural development amongst local communities. Another pilot project, the Serengeti Regional Conservation Strategy (NORAD □nance) starts operating with similar objectives around the Serengeti National Park in Northern Tanzania.

- 1989 Operation Uhai: Army, police and Wildlife Division (WD) □ght poaching while concentrating on village poachers in a country-wide operation.
- 1989 A□er initial studies and con□dence building activities SCP works in villages neighbouring the Selous Game Reserve in the North (Morogoro District) and promotes CBC. □ e SCP model includes the following activities: sensitization of villagers; information and awareness meetings; moderating decision making in Village assemblies; election and training of village natural resource committees and village game scouts, participatory land use plans and maps; identi□cation of WMA; obtaining subsistence wildlife quotas for villages; village hunting; anti poaching by village game scouts. □ e proceeds from the sale of the game meat are used for both community development projects (construction of classrooms, village o□ces/ meeting rooms, milling machines etc.), as well as support for the village game scouts.
- MBOMIPA (DfID □nance), another CBC pilot project, operates in Iringa District.
- 1990–1991 SCP bu□erzone program extended to □ve villages located in Songea and six in Tunduru District on the Southern border of the Selous.
- 1994 SCP: Village land use plans and maps are completed and approved by participating villages in Morogoro, Tunduru and Songea Districts
- 1995 A national Community-based Conservation Training Center (CBCTC) established by Wildlife Division in a former UNHCR refugee camp at Likuyu-Sekamaganga, Southern Selous

Policy and Management Plan for Tourist Hunting is signed by the Director of Wildlife but never subsequently implemented

Tanzania Village Land Policy passed.



- 1996 CBCTC starts operating and village game scouts and members of village natural resource committees and local government leaders from di□erent parts of the country participate in formal training.
- A□er having received applications for support to CBC from villages in Southern Tanzania along Ruvuma River □rst plans are being discussed at Wildlife Division and SCP for a Selous-Niassa Wildlife Corridor based on CBC.
- 1997 Task force to dra□ the new wildlife policy as well as regulations for CBC formed by Wildlife Division with support and participation of di□erent donors.
- 1998 Wildlife Policy is passed. It has a strong CBC component. □ e right of local communities to manage wildlife on their land for their own bene□it is a strong component of the policy. Insofar the paradigm change in the wildlife policy of the country has become o□cial. Wildlife conservation is perceived as part of the strategies to improve local livelihoods and reduce poverty. Full implementation of this policy requires that the Wildlife Conservation Act No. 1□of 1974 (WCA) is revised.
- e document is published only in English language. It takes several years for a donor to obtain permission by Director of Wildlife (DW) to have it translated into Swahili, so that the villages can inform themselves about their rights according to national policy. When □nally a Swahili version has been printed, all copies are locked away by order of DW.
- 1998– □003 Guidelines and Regulations for the formation and establishment of WMA are being worked by using the SCP project as a prototype for the design. Communities are involved in a number of participatory meetings. □ e framework is originally envisaged as to be simple enough so that the villages can work with it. WD insists on an extremely complicated set of rules, on very complex organizational structures and on a multitude of land use plans, environmental and business plans, wildlife counts, studies etc., so that the villages cannot deal with CBC anymore without outside technical and □nancial assistance. As a matter of fact, CBC projects cannot be established without the help of a foreign donor, as the WD does not provide the necessary assistance. Furthermore the WD forces donors into year long studies, evaluations etc., the results of which are mostly never used.

- 1999 Local Government Law is approved with the intent to facilitate political, administrative and □nancial decentralization.
- e Land Act and Village Land Act No 4 of 1999 are passed. All land is classi□ed as either general, village or reserved land. However the Act also legally devolves power to village level organs, particularly the Village Council to decide on land issues. Other changes include the institutionalization of participatory and transparent mechanisms in land allocation, determination of use, appropriation or access mechanisms and resolving con□icts related to land ownership and use. □ ese changes have signi□cant implications for use, access and conservation of natural resources
- 000 Planning starts for a WMA based Selous-Niassa Wildlife Corridor a□er several years of preparations. Aerial surveys and research into elephant migrations are conducted in following years. Communities actively drive the process. Ground □eldwork is conducted with the assistance of local villagers, village game scouts and traditional hunters to gain additional information about wildlife populations, migration patterns, poaching and human-wildlife con□ict.
- More villages join CBC in the districts neighbouring the Selous. Altogether there are 16 pilot WMA in Tanzania.
- 001 WD withdraws rights formerly given to village game scouts like identity cards through which they have a recognized status in WMA
- 00□ DW hands over the WMA of a particularly motivated and successful village to a private hunting company while the legal process of registration is advanced even though the village has full□lled all requirements. □ e village is not consulted. □ e company had been an accused in the o□cial "Report of the Presidential Commission of Inquiry Against Corruption".
- 003 A working group under the Ministry of Natural Resources and Tourism and □nalize a dra□ of the new Wildlife Act a□er a series of extensive nation-wide stakeholder dialogue conferences. □ e dra□ is never presented to Parliament



for debate. Instead it is withdrawn by the Wildlife Division for about two years and changed significantly in its relevant contents without any of the formerly involved groups being informed. The results of the stakeholder dialogue have little or no impact upon the contents.

- The SCP as a joint Tanzanian-German initiative comes to its end in December. Some major results in the field of CBC can be summed up as follows:
 - extension from 15 (1990) to 51 villages participating in CBC around the Selous Game Reserve; more would join, if they were allowed
 - 8,600 km² proposed WMA under village management
 - 300 village game scouts on duty
 - functioning self-administration at village level, National training centre CBCTC Likuyu Seka established and partly self-financing
 - The establishment of a wildlife corridor linking Selous with Niassa Reserve in Mozambique in process

A Reference Manual and Guidelines for the Designation and Management of Wildlife Management Areas is published in English and Kiswahili explaining the procedures for the creation of WMA to the 16 pilot WMA. The funding is by donors.

- 003- □004 A data base is being developed for tourist hunting in the Selous Game Reserve. The data are evaluated and presented in a major study which shows for the first time with empirical figures the performance of the Tanzanian hunting industry. Due to the lack of proper procedures for allocation of hunting blocks and deficiencies in managing quotas and concessions a major share of revenues never reaches the public budget nor is it available for communities.

- 004 The Tanzania Development Partners Group, which comprises all donors of development aid, publishes a discussion paper on wildlife hunting strongly criticizing the poor Governance in the conduct of tourist hunting by WD and the lack of benefit sharing with communities.

16 pilot WMA exist and are in different stages of registration. None of them has fulfilled the complicated requirements by the WD despite international expert advice, financed by donors.

CBC villages are supported to visit other WMA in the country.

□006 Public inauguration of the Selous Niassa Wildlife Corridor

- 007 - □009 The information on the poor quality of hunting administration becomes public knowledge and is debated in Parliament and in public. As a result a reform is demanded by Parliament and a number of responsible civil servants are transferred. The Ministry announces a reform until □011.

- 007 The Tanzania Natural Resource Forum, a donor-supported NGO wishing to promote a new rights-based approach for addressing critical natural resource management issues in Tanzania, engages and forces the government into a dialogue with civil society on the proposed Wildlife Act. The key factors raised are governance, democracy and livelihoods, which are regarded as crucial for the promotion of a devolved 'rights-based' approach necessary for achieving an equitable, sustainable and transparent management of the country's natural resources.

1990 - □009 The hunting industry as represented by TAHOA is vehemently opposed to CBC and due to its influence plays a major role in delaying the process. Local conflicts between communities and hunting companies develop. Communities in Northern Tanzania turn a number of hunting areas into photographic tourism areas, as this secures at least some revenues for them. The WD tries to prevent this, however unsuccessfully, with a clause in the Hunting Regulations (□000) giving itself the authority to control photographic tourism in the same way like tourist hunting on village land. With new regulations about non-consumptive wildlife utilisation (□007) the WD enforced permits and exorbitant levying fees for access related to photographic tourism activities in WMA and non-protected wildlife areas on village land. These fees were payable to the central government and consequently fuelled the tension between tour operators, hunting companies and villages seeking to generate income from wildlife. Although the fees have been revised the reduced economic incentive do not only have a negative impact on the communities' motivation to conserve wildlife but also on the development of community-based tourism.

- 009 CBO are increasingly acknowledged as Authorised Associations for the management of gazetted WMA and obtained user rights over wildlife.

However, after 10 years of preparation and pilot projects villages are still not sharing the revenues from wildlife utilisation on their land, in particular tourist hunting, according to an official benefit sharing formula promised years ago, but only receive some handouts from the WD based on individual arrangements

- The new Wildlife Act (GN 9, □008) has still not come into force, and it is unknown how much devolution of powers and revenues it will allow.

Case Study 4
ACHIEVEMENTS AND PRACTICAL LESSONS LEARNED FROM A DECADE OF WILDLIFE USE IN NAMIBIA'S COMMUNAL AREA CONSERVANCIES
 by L. Chris Weather, Eunice Petersen and Greenwell Matongo



Conservancy staff on annual game count. (Photo by Helge Denker, 2009)

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1. INTRODUCTION

Namibia has long been at the African forefront in the development and application of successful wildlife use policies and practices. In 1967, visionary conservationists enacted the 1967 Nature Conservation Ordinance 31, providing private land owners with rights over wildlife use – thereby transforming the perception of wildlife as a competitor to livestock production to a valuable asset to be sustainably managed for personal gain. The legislative foundation of wildlife use in Namibia was refined eight years later through the Nature Conservation Ordinance Number 4 of 1975, which further entrenched private land owners' rights over wildlife and related benefits. These incentive-based reforms have produced startling results, precipitating wide-scale recovery of wildlife populations on Namibia's private lands (43% of the country). By 1990 the aggregate value of wildlife use on private lands had risen by approximately 80% in real terms (J.I. Barnes and de Jaguar, J.L.V., 1996), while huntable game animals on private lands were estimated to have more than doubled from 565,000 to 1,161,000 (J.I. Barnes and Jones, B., 2009).

Upon the arrival of Namibia's independence in 1990, a new era of enlightened conservationists strove to introduce equivalent rights and benefits to wildlife for the traditional African communities found on Namibia's communal lands (41% of the country). In 1995, the Ministry of Environment and Tourism (MET) passed the communal area wildlife conservation policy entitled "Wildlife Management, Use and Tourism in Communal Areas". Shortly thereafter, in June 1996, the MET amended the Nature Conservation Ordinance of 1975 with Amendment No. 5 of 1996: Nature Conservation Amendment Act, 1996, which provides the legal basis for communities to gain rights over wildlife through conservancies. Cumulatively, the enactment of this new policy and Act were aimed at empowering rural African communities with the same rights over wildlife which Namibian private land owners had benefited from for the prior 30 years. By doing so, it was hoped that residents of communal areas would also develop incentives to sustainably manage wildlife, and thereby, catalyze a parallel wildlife recovery for Namibia's communal lands where wildlife populations were under threat.

In 1998, the Namibia's first four communal conservancies were registered, thereby allowing the traditional African communities of Namibia to legally benefit from numerous forms of wildlife use. This paper seeks to describe the achievements and practical lessons learned from more than a decade (1998-2009) of wildlife use in Namibia's communal area conservancies, illustrating progress made along the way.

Namibia is a large country (83,988 km²) located in southwestern Africa, where it is enclosed between South Africa to the south, Angola to the north, and Botswana to the east (Figure 1). With a population of approximately 2,000,000, Namibia is one of the most sparsely populated countries in sub-Saharan Africa. A predominantly arid land, Namibia is surprisingly species-rich. Its vast wilderness areas and diverse ecosystems provide superb habitat for a range of Africa's megafauna, while endemism for both flora and fauna is unexpectedly high for such an arid setting.

From 1966 to 1989, Namibia was under military occupation, with South African Defense Forces (SADF) taking on the dualist roles of fighting internal revolutionary forces seeking freedom from an oppressive apartheid system and countering the perceived spread of communism into southern Africa from Angola. During this period, wildlife were subjected to heavy commercial poaching operations (i.e., rhino horn and ivory) and uncontrolled hunting by both SADF soldiers and community members. As a consequence, wildlife populations in most of these northern communal areas were at historical lows by the mid-1980s and early 1990s. In some communal areas, large game animals had been completely eradicated (i.e., north central Ovambo lands), while in other areas (i.e., East Caprivi floodplains, parts of Kavango and Bushmanland, and the southern communal lands) only fragmented populations of game remained. Prior to and immediately post-independence, communal area wildlife population trends were largely downwards and in need of urgent assistance.

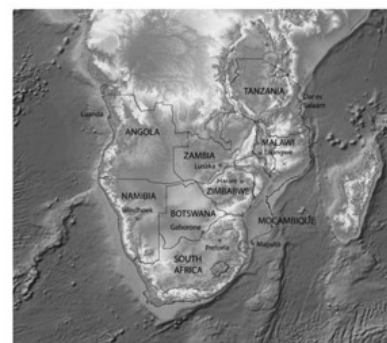


Figure 1. Namibia in proximity to surrounding southern Africa countries (Map courtesy of RAISONI).

3. COMMUNAL AREA CONSERVANCIES

Following independence in 1990, conservationists took bold steps to address the dwindling game populations in Namibia's communal areas. The passage of a new communal area wildlife policy in 1995, followed shortly thereafter by an amendment to the Nature Conservation Act in 1996, granted communal area residents with conditional rights over wildlife if they formed a conservancy¹⁴. In order to qualify for these wildlife rights the involved communities are required to meet the following legal conditions:

- a) be legally constituted;
- b) have clearly defined physical boundaries that are accepted by neighbouring communities and conservancies;
- c) be composed of members defined by the community within the conservancy;
- d) have a representative conservancy committee, having a sound accounting system and effective secretariat; and
- e) have a sustainable game management plan.

Once the above criteria have been met, a prospective communal conservancy must submit its application to the Ministry of Environment & Tourism (MET). If deemed complete, the conservancy is then formally registered through the Government Gazette, providing the conservancy with legal registration and recognition by all ministries of the Government of the Republic of Namibia.

Upon registration, a conservancy then receives the rights to wildlife-related benefits from commercial photographic tourism operations and the various forms of wildlife use. In both instances, the conservancy may either directly manage the resulting enterprises or contract with the private sector through a concession agreement. Photographic related tourism enterprises commonly include community campsites, joint venture lodge operations, guided tours, traditional villages, and handicraft production. Of particular relevance to this paper are the three forms of wildlife use conservancies practice and benefit from, including:

- Trophy hunting – hunting by clients (normally foreign) who pay for the right to hunt animals and take a trophy home as part of the experience;
- Own-use meat harvesting – self-regulated hunting by the conservancy to provide meat for consumption by conservancy residents, or local events and special cultural festivals;

- Shoot-and-sale – harvesting of game for the commercial sale of the meat to markets outside of the conservancy;
- Premium hunting – hunting of game within a conservancy whereby the client pays exclusively for the hunting experience, but is not allowed to take any portion of the trophy or meat from the conservancy; and
- Catch, Keep and Sale – capture of live animals within the conservancy for sale to clients outside of the conservancy.

3.1 Status of Communal Conservancies

The passage of the communal conservancy legislation has precipitated a conservation movement of impressive scale in Namibia. The Nyae Nyae Conservancy was registered as Namibia's first communal conservancy in February, 1998, but was joined shortly thereafter by the Salambala, Torra, and #Khoadi //Hoas Conservancies in June, 1998. These initial four conservancies all proved to be highly successful and initiated a wave of communal conservancies which has yet to crest. By mid-2009, a total of 55 communal conservancies had formed (Figure 2), covering approximately 1.6 million hectares and engaging more than 30,000 community members. These figures represent 15.3% of the country's landmass and 1.4% of its population, respectively. There remain an estimated 10-15 conservancies in various stages of formation, and it is believed the communal conservancy movement will eventually peak at around 90 conservancies which are anticipated to cover around 1% of Namibia.



Figure 2. Registered Communal Area Conservancies, State Protected Areas, and Tourism Concessions as of July, 2009 (Map source: Ministry of Environment & Tourism, 2009).

¹⁴ Conservancies are legally-recognized, geographically-defined areas that have been formed by communities who have united to manage and benefit from wildlife and other natural resources.

A key driver in the conservancy formation process has been the rapid manner in which conservancies can secure benefits from wildlife use. Conservancy quotas are requested during the final stages of conservancy formation, thereby positioning conservancies to quickly seek a private sector partner to market and manage their lucrative trophy hunting concessions after registration of the conservancy. In most instances, a newly registered conservancy can start receiving income from a trophy hunting concession within four months of its registration. The immediacy of the income and associated benefits (meat, employment, etc.) from trophy hunting activities is a crucial reward to community members who may take two years (or longer) to secure conservancy registration, with the receipt of such benefits quickly demonstrating and reinforcing how valuable the conservancy's wildlife resource is. The increased community awareness of the value of wildlife is a powerful antipoaching stimulus, creating effective internal social pressures against poaching. As wildlife populations recover, then conservancies advance to the other forms of wildlife use and tourism as described above.

Benefits to conservancies from wildlife have demonstrated a steep growth curve, rising from nothing in 1997 to N\$11,700,805 (US\$1,586,036) during 2008 (Figure 3). This amount represents approximately 41% of the benefits received by conservancies in 2008. Cumulatively (from 1998 to 2008), conservancies and their members have received a total of N\$48,633,418 in sustainable use benefits since registration of the first four conservancies.

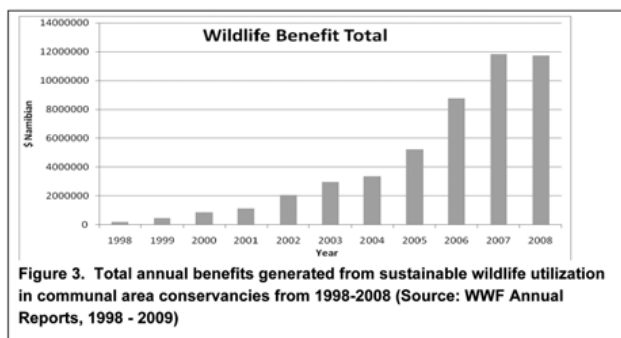


Figure 3. Total annual benefits generated from sustainable wildlife utilization in communal area conservancies from 1998-2008 (Source: WWF Annual Reports, 1998 - 2009)

Trophy hunting has been the largest contributor from sustainable wildlife used, followed by the combined value of meat received by conservancy members through trophy-hunted animals and conservancy harvesting of meat through its own-use meat quotas (Figure 4, below). These two benefits far outweigh income from employment or the income from shoot-and-sale operations, which has overtaken employment income for the two of the past three years. In addition to these direct tangible benefits, sustainable wildlife use in conservancies have also precipitated a number of important social benefits including: community recognition and empowerment; rural development through conservancy funded projects; and improved community governance – a factor which is doubly important given Namibia's long history of apartheid.

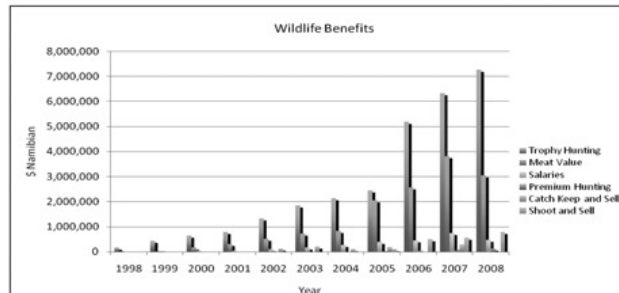


Figure 4. Comparative benefits generated annually by wildlife utilization in communal conservancies through trophy hunting, meat, salaries, premium hunting, catch keep and sell, and shoot-and-sell harvesting from 1998-2008 (Source: WWF Annual Reports, 1998 - 2009).

4. CONSERVATION BENEFITS CATALYZED BY SUSTAINABLE USE

The acquisition of wildlife benefits has radically altered community perceptions towards wildlife in recipient conservancies. Prior to the formation of communal conservancies, wildlife were largely regarded as competition to livestock grazing and/or despised as a threat to personal assets (i.e., crops, livestock, and infrastructure) or

even the lives of one's family. In short, communities were alienated from wildlife with the best use of wildlife being illegally poached meat for the pot. In contrast, the ability of conservancies to receive significant benefits from wildlife has fostered a sense of community ownership and pride over wildlife, and produced a scenario in which wildlife are now being integrated into rural community livelihoods. Poaching is no longer socially acceptable and the presence of wildlife is being promoted through participatory community land-use zoning processes which create core wildlife (wildlife only) and multiple-use (wildlife mixed with livestock and people) areas in which wildlife numbers are rebounding and flourishing. At a landscape scale, much of this is happening immediately adjacent to open-system national parks, creating wildlife friendly buffer zones around parks.

The impacts of this changed perception are manifested through increased tolerance of community members towards traditional conflict species (i.e., elephants, lions, cheetah, etc.) and rebounding wildlife populations across the communal areas. Examples of such recoveries include: 1) re-establishment of wildlife populations on East Caprivi's floodplains, where almost no wildlife was present in the mid-1990s; 2) a more than six-fold increase of wildlife in the Nyae Nyae conservancy as documented by three aerial censuses carried out in 1994, 1998, and 2004; 3) an increase of national elephant populations from approximately 7,000 in 1995 to more than 16,000 by 2008; and 4) a more than doubling of free-roaming black rhino populations from 1990 to 2008 in the northwestern communal and state lands. The above are only a handful of the all impressive transformation which has been taking place over the past 15 years because of Namibia's community friendly wildlife conservation policies. But perhaps, the most convincing case is the expansion of lion numbers and range in the Kunene region, where lions in this region have increased from approximately 30 to an estimated 125 by 2008 (P. Stander, 2008) and expanded their range by several thousand square kilometers (Figure 5). Such a recovery could only have been possible if accompanied by a massive recovery of the plains game prey base and increased tolerance of the resident communities.

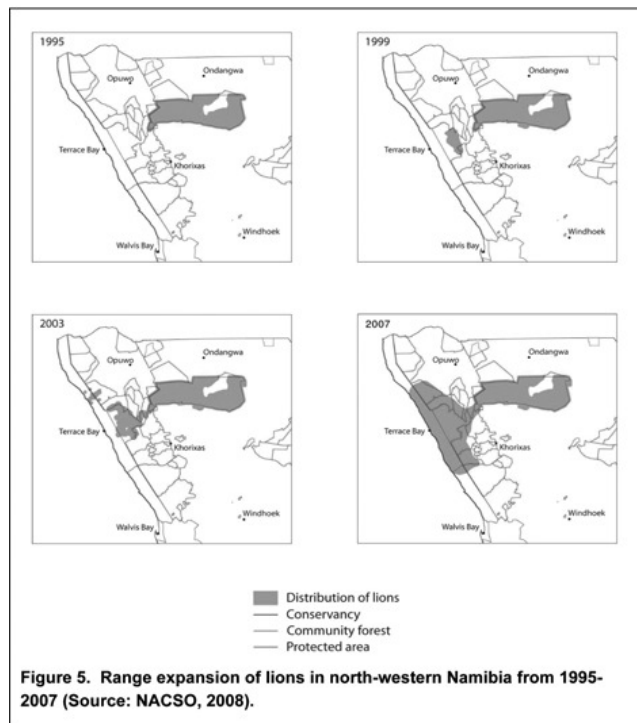


Figure 5. Range expansion of lions in north-western Namibia from 1995-2007 (Source: NACSO, 2008).

5. CURRENT STATUS OF GAME USE IN COMMUNAL CONSERVANCIES

A total of 33 communal conservancies now participate in trophy hunting (Figure 6) on 7 individual community-managed trophy hunting concessions operating on 79,076 km² of land through communal conservancies. This growth in trophy hunting concessions can be contrasted to the pre-conservancy era, when no communities were allowed to benefit from trophy hunting and where only a small handful of communities in northwest Namibia were allowed to conduct own-use harvests of game under highly controlled conditions.



In addition to the increase in trophy hunting concessions, several communal conservancies have initiated the concept of "Premium Hunting". This form of hunting is done under the auspices of a qualified conservancy hunting guide, who hosts and guides clients on high-quality natural hunts taking place within the conservancy boundaries. This type of hunt is aimed at hunting clientele who want to experience a high-quality hunt, but do so for the experience of the hunt, rather than the export of a trophy. These hunts are less costly and done under more rustic conditions than a high-end trophy hunting experience. Shoot-and-sale forms of wildlife harvesting has been implemented too.

Lastly, more than 40 communal conservancies are now able to legally hunt their own game through "own-use" hunting operations. Through this form of hunting, conservancy members and/or staff are able to legally hunt game animals. This form of hunting reinforces strong cultural values around hunting, while concomitantly providing much appreciated meat to conservancy members.

6. LESSONS LEARNED

Sustainable wildlife use has now been practiced for almost 100 years through Namibia's communal conservancy programme. During this timeframe, many lessons have been learned through both success and failure. Following are a few of such lessons learned:

- **Use It Or Lose It** – The Namibia Conservancy movement strongly reinforces the old adage "Use it or lose it". The traditional colonial African wildlife policies forbid communities the right to use or benefit from wildlife. As a result, wildlife were not valued or managed as an asset, resulting with heavy poaching and little consideration for the long-term presence of wildlife in rural livelihood strategies. Predictably, wildlife populations across Namibia's communal areas were under extreme threat from this approach. The Namibian Government's enlightened approach of providing communities with the rights to use and benefit from wildlife have clearly demonstrated that once communities have these rights, they also gain incentives to retain wildlife on their lands as a valuable asset.
- **Not All Like Change** – The advent of the communal conservancy concept was not necessarily welcomed by some stakeholders. Many traditional governmental

conservationists perceived community members as the enemy (i.e., as the poachers who must be punished). Similarly, many of the safari operators did not want to be accountable to a community, nor deal with the transaction costs of working with a conservancy committee on day-to-day operations of the trophy hunting concessions.

- **Concession Tender Processes Are Critical** – Tenders for hunting concessions have proven invaluable for a number of reasons. First, a widely disseminated tender ensures that a competitive market and optimal value for a concession is received. Secondly, the tender allows community members to quickly see how valuable wildlife are and the relative values of the species on offer. Thirdly, the tender process is empowering to a conservancy, as it promotes accountability from the potential, bidding safari operators to the community. Fourthly, tenders lay the groundwork for working relationships, specify community employment/capacity-building requirements, and secure additional conservation investments. Lastly, tenders assist in creating transparency around the award of concessions and reduce the risk of bribes or political interference in the concession award process.
- **Contracts Are Effective Conservation And Development Tools** – A good contract should protect the interests and rights of all parties, placing performance responsibilities and penalties on each party if they fail to meet contractual obligations. The contract codifies and legally binds each party on the matters agreed upon by the parties through the tender process. In the case of Namibia, trophy hunting concession contracts contain clauses aimed at ensuring the operator makes timely payment for animals harvested, employs and trains community members with the knowledge and skills required to be competent in the hunting sector, invests in conservation and development projects, distributes meat from harvested animals in a timely and agreed-upon manner, and provides reports against his activities. On the other side, the conservancy is to control poaching, adhere to its conservancy management plans and zones, provide an area for the operator's hunting camp(s), and ensure good relations with the broader community.
- **Not All Contracts Work Smoothly** – Though the conservancy movement has been largely successful, it has not been without its problems. There are documented situations in which conservancies have not met their contractual obligations to safari operators (i.e., not followed their management plans, not effectively communicated with the operators, etc.) or mis-managed funds received from contracts. On the



otherhand, there are safari operators who have consistently not honoured contractual payments, have used unethical means of harvesting game, or have attempted to bribe stakeholders to influence the outcome of concession awards. There is a need to have support systems in place that assist in the resolution of such occurrences and ensure that good governance is in place.

- **Communication Is Essential** – Conservancies tend to operate in large, remote areas where communication facilities and means are limited. Similarly, conservancies must deal with a large and diverse set of stakeholders ranging from hundreds of individual members, traditional authorities, government officials, safari operators, lodge operators, tourists, and more. Consequently, communication is a challenge, and poor or ad hoc communication is frequently the cause of lack of awareness of issues, disputes, and/or misunderstandings. Effective and routine communication is essential for conservancies and related stakeholders to have productive relationships.
- **It's Not All About Money** – Many over-estimate the importance in money when decisions are made around the award of trophy hunting contracts. Experience with Namibia's conservancies has shown that communities will often choose safari company operators who offer the potential for respectful and constructive partnerships in exchange for less income. This point was particularly emphasized in the 2006 award of the Bwabwata Kwandu concession when the community turned down the top offer (which was more than US\$50,000 higher than the second best financial offer) because of the negative experiences the community had with this operator in the past.
- **Quota Setting Is A Skill and Art that Takes Time To Master** – The setting of sustainable and appropriate harvest quotas is essential to ensure attainment of species management objectives and maintenance of trophy quality. Quotas for communal conservancies are updated annually, based upon available data (i.e., aerial censuses if done, road counts, community game guard counts, safari operator reports, local community knowledge, and the previous year's harvest data). A quota setting development and review approach has been in operation for a number of years, but participants have yet to fully master the skills and arts to integrate the various information bits into an optimal quoting setting process. It takes time and persistence to bring stakeholders together and transfer the appropriate knowledge and skills to allow stakeholders to come up with consistently reliable quotas.

- **Management Responsibility Must Be Linked To Benefit Flows** – It is essential that communities understand the linkage between wildlife benefits received and their related wildlife/conservancy management responsibilities. Long-term effective wildlife management will best be achieved if conservancies can clearly see that more effective management will produce more income and benefits, and conversely, that weaker management will result in less income and benefits. Such an understanding provides incentives for good management.
- **Conservation Success Can Be A Double-Edged Sword** – The conservancy movement has stimulated a massive recovery of plains and big game in Namibia. The recovering wildlife populations, have in turn, produced a significant escalation in human/wildlife conflict. There are increasingly larger numbers of complaints arising about crop-raiding elephants, infrastructure damage from elephants, and livestock losses from cheetah, hyena, leopard and lion. Though conservancies are acquiring increasing collective incomes and benefits from the increased wildlife populations, the costs of the human/wildlife conflicts are being borne by individual conservancy members. Thus, there is an imperative need to put in place more effective human/wildlife conflict mitigation practices for the conservancy movement to maintain its level of popularity.
- **Problem Animal Hunts Are Often Problematic** – The award of problem animal removal to a safari operator can be both efficient and cost beneficial to a conservancy. However, such hunts have tended to be poorly managed in Namibia's conservancies, generally leading to the harvesting legitimate trophy animals instead of the real offending problem animals. There have been repeated instances of full-maned lions or heavy-tusked elephants being removed as the problem animals while the offending animals are not dealt with. Such instances are purely a case of safari operators trying to maximize income from a client by paying a reduced hunting fee to the State or conservancy, while increasing his profit margins. The harvesting of trophy animals as problem animals distorts quota setting efforts, can negatively affect biological growth rates (i.e., lions), and does little to deter human/wildlife conflict in the area. It is essential to improve the management of problem animal hunts.
- **The Complexity of Conservancy Management Multiplies As The Number of Types of Resource Use Increase** – The long-term presence of wildlife in Africa is dependent upon its ability to provide benefits greater than other forms of land-use which are not compatible with wildlife. In order to optimize returns from wildlife, there is a need



to benefit from wildlife through as many means as possible. In this regard, communal conservancies are capitalizing on their recovering wildlife resources through various forms of use (i.e., trophy hunting, own-use meat harvesting, shoot-and-sale, premium hunting, and live game sales) and a range of photographic tourism options (i.e., joint venture lodges, campsites, mobile tours, etc.). Effective management of these multiple (and often incompatible uses) requires disciplined spatial and temporal zoning, and the capacity for a conservancy to practice and enforce such zonations.

- **Communities Are Part Of the Equation** – Many of Namibia's old-school safari operators do not want to acknowledge or work with communities. However, the future of wildlife on communal lands is dependent upon the attitudes and livelihood strategies of Namibia's growing rural human population, and it is short-sighted not to recognize the need for communities to become responsible stewards of communal area wildlife. It is predictable that if government is to choose between the hunting industry of the livelihoods of communal area residents that human needs will prevail. Consequently, it is necessary for operators to become strong conservancy partners if the hunting industry is to grow and sustain itself in future years.

7. SUMMARY

In slightly more than a decade, the communal area conservancy movement has made impressive strides towards linking recovering wildlife populations with improved community livelihoods. Namibia's 55 communal conservancies now cover more than 15% of its land surface and encompass one out of eight Namibia citizens. The conservation success of the conservancies has been documented by rapidly increasing wildlife populations across the communal landscapes, with top of the food chain predators showing extensive expansions of their range. The achievement of such wildlife recoveries (especially of conflict species) would not have been possible without the growing community awareness and appreciation of the value of wildlife.

The sustainable use of wildlife, largely through trophy hunting, has played a key, catalytic role in conservancy movement, providing almost N\$50 million in benefits (cash income, employment, and meat) directly to participating conservancies and their members since the initial establishment of the first four conservancies in 1998. The speed, at which wildlife use benefits have been acquired, combined with

the direct and tangible linkages between the use of wildlife and benefits received, has assisted communities to quickly grasp and appreciate the value of wildlife in a very short period of time. Consequently, there is both a growing demand for more conservancies and ever increasing community requests to assist new and emerging conservancies with the establishment of viable game populations.

There have been many lessons learned through trial and error over the past 10 years, but progress has and continues to be made. Some stakeholders have found it difficult to adapt and recognize the validity of communities as key players in wildlife conservation or participants in the hunting industry. However, there can be no denying of the role that conservancies have played in assisting communities to embrace wildlife as an added and diversified livelihood strategy, and the resultant positive consequences to the hunting products on offer in Namibia. With 17 large communal conservancy trophy hunting concessions, and more on the way, Namibia is becoming an internationally recognized big game hunting destination. The conservancy movement, though not without its challenges, bodes well for the future of both conservation and development in Namibia and offers examples for others in Africa and the world to emulate.

BIBLIOGRAPHY

- Barnard, P. (ed.). 1998. Biological Diversity in Namibia: a Country Study. Namibian National Biodiversity Task Force. Windhoek. 325 pp.
- Barnes, J.I. & de Jager, J.L.V. 1996. Economic and financial incentives for wildlife use on private land in Namibia and the implications for policy. *South African Journal of Wildlife Research* 26 (2): 37-46.
- Government of Republic of Namibia. 2006. Promulgation of Nature Conservation Amendment Act, 1996 (Act 5 of 1996). Government Gazette of The Republic of Namibia No. 1333. Windhoek, Namibia.
- Humavindu, M.N. & Barnes, J.I. 2003. Trophy hunting in the Namibian economy: an assessment. *South African Journal of Wildlife Research* 33 (2): 65-70.
- Ministry of Environment & Tourism. 2006. Namibian Government Support Use of Game. In *Hunting Namibia 2005*. Windhoek, Namibia.
- NACSO. 2008. Namibia's Communal Area Conservancies – A Review of Progress and Challenges In 2007. NACSO. Windhoek, Namibia. 120 pp. Stander, Phillip. 2007. Behaviour-ecology and Conservation of desert-adapted Lions. 2007 Progress Report of the Kunene Lion Project. Desert Lions Conservation. Namibia. pp. 17.

Case Study 5 COMMUNITY-BASED FOREST AND GAME MANAGEMENT IN THE VILLAGE OF "GEBHARDSHAIN", GERMANY by Rolf D. Baldus

INTRODUCTION

Developing countries, and Africa in particular, are not the only places where cooperative self-help organisations with the objective of sustainable management of natural resources can be found. The author of the main paper has been involved in such activities in his home village in Germany ever since he was a child (quite a considerable period of time!). The fact that he was able to apply the very principles gained through a lifetime of experience to the CBNRM programmes supported through official Tanzanian-German development cooperation was appreciated by his Tanzanian counterparts. As a result, some of his advisory contributions were actually considered as credible!

Professor Ostrom has analysed a variety of operational case studies of self-organised and self-governed common pool resource programmes from around the world, some of which have been in existence for centuries. She acknowledges that an extraordinarily rich case study literature exists and frequently has appeared in "obscure publications" (Ostrom 2008, p. xv). This is but another such case study in an admittedly "obscure publication".

THE SETTING

Gebhardshain is a village of about 1900 inhabitants situated in a forested low mountain range of the Westerwald (Western Forest), in the state of Rhineland-Palatinate between Frankfurt and Cologne. The nearby Sieg River drains this land into the Rhine, and gives the greater area the name "Siegerland".

In the late middle ages people eeked out a meagre existence from subsistence agriculture, and poverty was widespread. This situation remained until the beginning of the previous century, and it is no coincidence that the German and subsequent international rural cooperative movement was started here. Friedrich Wilhelm Raiffeisen (1818 – 1888) created the first credit and savings societies. These self-help organisations were similar to those of Muhammad Yunus in Bangladesh, for which he was awarded the Nobel Peace Prize. Raiffeisen never achieved international celebrity status, but the global impact of his contributions was far greater over time until today.

The Siegerland has rich iron ore deposits coming up to the surface, and iron was processed here for tools and arms since about 500 BC. Great quantities of charcoal were needed for those primitive iron ore smelting technologies, and destruction of the forest dates back to those ancient times. The forests required hundreds of years to recover yet deforestation was repeated several times over until the medieval times.

As the forest provided such a vital resource of common ownership, shortages that resulted from excessive use attracted a great deal of attention. This stimulated processes for development of strategies for sustainable use, and evolved into mechanisms that could overcome the "tragedy of the commons" through regulated community access to the forest resources. Once the authorities realised the public benefit of such an order they put it into law. Various decrees have legislated sustainable forestry procedures, first by the ruling gentry, the Dukes of Nassau and Sayn, in the mid 16th century and later by Imperial Prussian legislation in the 19th century. The legal basis for the cooperative described here (and still enforced in modern Germany) dates back to the imperial decree of April 9th, 1890 which starts with the words "We Wilhelm, by the grace of God, King of Prussia ..."

The villagers of Gebhardshain created three separate forestry cooperatives over the years, and they still exist today. They differ in legal status and some procedures, but the general principles are the same. I shall restrict this document to a simple description of the main cooperative, known as the Hauberg.

MANAGING THE HAUBERG FOREST COOPERATIVELY

Around the late 16th century 40 families of Gebhardshain, which were the majority of inhabitants, established the Hauberg cooperative for the purpose of utilising the forest in a mutually agreed upon manner. "Hauberg" literally means "the hill where you cut down trees". Each cooperative in the village had its own name, the two more recent ones were named after the areas they used, whereas the older one described here was simply called "Wald", meaning "forest". Each family (the subsequent head of that family is referred to as the member) received one 40th share of the forest as collective ownership, although nobody could lay claim to a specific piece of land. The regeneration cycle of the forest was set at 40 years, and the total Hauberg land was therefore divided in 40 parcels, with only one parcel of land used each year.

Every year each member received one share of forest within the parcel of land selected for use. The lots were distributed by a raffle, as the shares were naturally not equal. The drawing of lots was complicated but transparent, as the outcome should be a fair distribution that is acceptable to all members. The members and their families would cut the trees themselves, and in return were entitled to the wood and other by products.

The typical vegetation consisted of broad-leaved trees, such as oak and birch. The wood was used primarily for charcoal production (for iron ore smelting), but also for domestic energy such as for heating homes in the winter and for cooking purposes. The bark of oak trees was sold to tanneries or bartered for leather, which was then processed into shoes by the village shoemaker. Small branches were collected and woven into baskets and brooms. Brushwood was used for starting/heating the public ovens which were used to bake bread and cakes.

The trees were cut down with axes and a slasher tool typical for this area, similar to the African machetes or pangas. The trees would sprout more readily when cut with an axe rather than sawn off. In the first two to three years after cutting, the clear-cut land was planted with primitive types of grain, as due to poor soils and a harsh climate, the agricultural land did not produce enough to feed the large families. The cleared cut down piece of Hauberg was used as communal pasture for cows which served as draft animals, for milk and also for meat. As in Africa today, it was the work of the children to herd the cows in the Hauberg, and was amongst my father's duties as a child around 1900. The land was then left alone in about the tenth year after harvest so that the trees could grow until they reached a diameter sufficient for cutting and the whole cycle could start over again.

The shares of members were handed down, always to the child, who inherited the house, not necessarily the oldest boy. Shares could be sold, normally to a resident of the village, but could not be divided. The Hauberg cooperative is a legal entity and can thus conclude contracts and engage in business and economic transactions. All important policy and management decisions are taken by an annual general assembly. Membership elects a managing Board, and the Chairman of this board is the Manager of the Hauberg. The Board meets regularly to decide on management issues. The local Government forester renders professional advice, and the cooperative pays a prescribed fee, based on the number of hectares, for this service. The members have always managed

to keep public bodies out of the cooperative. The municipality would have liked to acquire shares in order to exert influence, but this was always prevented. This applies in the same way to the other two Hauberg cooperatives in the village. During the Nazi rule (1933 – 1945), for example, a part of the forest of one of these two cooperatives was expropriated by the fascist state and handed over to politically loyal farmers from outside in accordance with Nazi ideology. Members and the Board fought this, which at that time exposed them to great personal risk due to the terror regime in power. After the war the cooperative had to conduct a long lawsuit in order to receive its property back.

The Hauberg was of great economic importance at the time it was created. Charcoal production lost its prominence in the 19th century due to the availability of more efficient energies like coal and electricity that reduced the demand for charcoal. For the middle of the last century, the net profit of one hectare of the Hauberg per year can be estimated at about half a teacher's monthly salary. As every share was equal to about 0,7 hectares, the monetary value per family was not great, but it was nevertheless a contribution that supplemented other sources of income and subsistence, and it was consequently highly valued. Nowadays the economic importance is even less, as members may receive on an average €100 to €200 per year, however this small amount strengthens the personal bonds that members have with their cooperatives and it remains a highly treasured incentive. With the new high energy prices in recent years the Hauberg has increased in importance again, as many members have gone back to using firewood for heating purposes.

Over the years there have occasionally been conflicts, usually when members have behaved selfishly, but there have also been cases of bad Governance by the Board. It was normally the disciplinary force of the group and the need to find compromise required by the rules, which sorted these matters out.

HUNTING

The Hauberg is a member of the hunting cooperative which is in charge of the management of wildlife on village land according to law. The Hauberg's income from hunting is normally just enough to cover its administrative expenses. Wildlife is another common pool resource that is managed in Germany on a cooperative basis, except on larger private or Government properties of a minimum size, which can manage the wildlife on their own lands themselves.

Hunting and wildlife use in the middle ages was the privilege of the higher and lower gentry. Farmers had to pay the costs of living with wildlife in form of crop damage and labour to assist driven hunts. Human-wildlife conflict prevailed, and the right of the common man to hunt or kill wildlife has always been an important demand in all German social uprisings and revolts, as in the "Peasants' Wars" (1524 – 1526). After the German revolution (1848/49) hunting restrictions in some parts of Germany were either waived or not enforced, and game was eradicated there in a very short time. The tragedy of the commons had won again. The hunting rights were connected to the ownership of land. This meant that the gentry could no longer hunt on the land of the peasants. At the same time minimum sizes of hunting areas were prescribed as a means of ensuring sustainability and safety for the hunters. This ultimately led to the development of our German hunting legislation, which takes into account the dangers of overexploitation of commons. It is generally recognised that this system is the reason why Germany, a densely populated and industrialised country has a sustainable annual off-take of 1.6 million hoofed animals (wild pigs, roe deer, red deer etc.) and 3.3 million others (hare, game birds, foxes etc.). The total wholesale value of venison is in the range of €180 million, while the monetary value of the hunting industry is estimated at around a billion Euro per year, not counting non-monetary inputs and outputs.

Game is classified as "res nullius" (nobody's thing), which means that it cannot be owned by anybody. People are not allowed to kill or take ownership of a live or dead wild animal or part thereof. The right to hunt lies with the landowner and is regulated by law as far as numbers, species and seasons are concerned. It is important to note that access is regulated by the minimum size a hunting area must cover. It must be at least 75 contiguous hectares when owned by one person. The owner then has the right to self-hunt the area provided he or she has the necessary qualifications, which are granted based on an examination and a licence, or to lease it to a similarly qualified person. For smaller properties, which are more frequently the case, the owners are required to pool their areas to reach a minimum size of 150 hectares and to create a hunting cooperative, which will then be allowed to lease out the hunting rights to a qualified person. Annual lease fees vary greatly, depending on the type of game and the general quality of hunting in the area, but range on average between €15 and €50 per hectare per year, exclusive of taxes and payments for crop-damage, which are the liability of the leaseholder.

In accordance with this system the Hauberg association is a member of the local hunting cooperative and receives the lease fee according to the size of its property. Hunting is fully sustainable and plays a major role in maintaining biodiversity in the region.

ANNEX



Magololo waving a tail of a Nyasa wildebeest during quota hunting in the Jukumu WMA north of the Selous Game Reserve in the year 1993



Discussing wildlife management with villagers on a market place
Photo by Rudolf Hahn



Village hunters with a duiker
Photo by Rolf D. Baldus



Sale of buffalo meat by village game scouts of a village Wildlife Management Area, Selous Niassa Corridor Southern Tanzania
Photo by Rudolf Hahn



Villages have a quota for hunting crocodiles: skinning crocodiles
Photo by Ludwig Siege



People must live side by side with dangerous animals
Photo by Ludwig Siege



Villagers carry meat from a community hunt back home
Photo by Rolf D. Baldus



Communities can benefit from trophy hunting: Roosevelt sable from a village hunting area
Photo by Rolf D. Baldus



Village game scouts in Ngarambe Village with poachers they caught
Photo by Rolf D. Baldus



Village Wildlife Committee debates wildlife management issues
Photo by Rolf D. Baldus



Village game scouts preparing for a foot patrol in a wildlife management area
Photo by Rudolf Hahn

Village game scouts have collected snares
Photo by Rolf D. Baldus



Members of a wildlife committee with impounded wire snares and a muzzle loader
Photo by Rudolf Hahn



Interviewing women who trade with fish
Photo by Rudolf Hahn



Burning nylon snares
Photo by Rudolf Hahn