

SUSTAINABLE DEVELOPMENT AND WILDLIFE CONSERVATION IN TANZANIAN MAASAILAND

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(Received 18 February 2000; accepted 10 August 2000)

Abstract. Many current wildlife conservation efforts in Africa focus on providing local communities with economic incentives to utilize wildlife as a form of land use in order to achieve the twin goals of ecological preservation as well as sustainable human economic development. Tanzanian Maasailand is home to some of the greatest concentrations of large mammals remaining outside National Parks and reserves, as well as a uniquely traditional human culture in the form of the Maasai themselves. Both are increasingly threatened by a variety of factors; poaching and habitat loss for wildlife, and the increasing marginalization of their pastoralist economy with regards to the Maasai. The fundamental cause of declining wildlife populations and biodiversity loss is that the Maasai have little economic or social interest in wildlife due to centralized management and financial benefits which are directed primarily to the Tanzanian state. Maasai pastoralism is highly compatible with wildlife, and the potential for the local communities to sustainably manage and benefit from this resource is promising. However, implementation of effective community-based natural resource management in the area faces political, cultural, and economic obstacles which will be critical in determining the outcomes of both conservation and community development efforts in Maasailand.

Key words: community conservation, Maasai, Tanzania, wildlife conservation

Introduction

The combined effects of rapid population growth, government mismanagement and corruption, numerous civil wars, and a woeful lack of commercial trade and employment opportunities, have greatly endangered even the meager goal of basic human subsistence throughout much of the African continent. At the same time, it is of no surprise that under such conditions Africa's unique array of wildlife and ecological resources face an ever-increasing set of pressures. Today, efforts to find solutions to these daunting problems, in Africa and elsewhere, often revolve around attempts to reconcile economic development and conservation issues by promoting sustainable utilization of natural resources. Wildlife, in particular, has a high commercial value and earns millions of dollars in foreign exchange each year for African countries through photographic tourism and safari hunting, yet animal populations continue to lose ground throughout many parts of the continent. In areas outside the limited network of parks and game reserves, the future of the continent's remarkable wildlife populations will depend on being able to translate these market values into genuine incentives for sustainable resource stewardship among rural Africans.

This approach to wildlife and biodiversity conservation is a considerable departure from the traditional means employed for most of the century. In Africa, European colonial



administrations initiated the first main conservation measures by establishing large parks and reserves and enacting restrictions on hunting wild game in order to protect species from off-take by natives as well as over-hunting by the Europeans themselves (Owen-Smith, 1993). These policies essentially put ownership of all African wildlife in the hands of the state, alienating it from rural communities. Large parks such as Tanzania's Serengeti were established by evicting the native inhabitants from their traditional homes and prohibiting traditional resource use practices (Bonner, 1993). These colonial policies of enacting conservation at the expense of local peoples was continued by post-independence governments, and the ownership and administrative responsibility with respect to wildlife remains primarily in the hands of African bureaucrats to this day. At the same time rural people who share the land with wildlife suffer from lost crops, livestock, and human lives. The result is that across the continent wildlife has been a resource of great value and benefit to the state and associated elites, as well as to Western tourists and conservationists, but has brought little benefit and considerable cost to most African people.

This negative relationship between people and wildlife has resulted in most Africans being agents of wildlife decline rather than sustainable conservation. As a result of these past failings as well as a general shift in attitudes for both ideological and practical purposes, there has been an extensive re-thinking of African conservation strategies over the past decade. Most conservationists are now convinced that if the continent's natural heritage is to survive, local communities must be able to profit from wildlife and have a much greater say in management decisions (Getz et al., 1999; Hulme and Murphree, 1999). These community-based approaches are based on the principle that for wildlife to survive local people must be able to profit from and manage the animals living around them as a form of land use, taking the initiative in conserving the resource out of their own economic interest (Child, 1995; Rihoy, 1995; Western and Wright, 1994). While this more grass-roots and decentralized approach has considerable potential for better-reconciling wildlife conservation with human needs and economic realities, it nevertheless involves complex ecological, economic, cultural, and political factors and rarely leads to easy answers. This paper examines these interlocking issues in Tanzanian Maasailand [a term that roughly encompasses four administrative districts: Monduli, Simanjiro, Kiteto, and Ngorongoro, containing 63,393 km² (United Republic of Tanzania, 1998)], home to some of the greatest and most diverse concentrations of wildlife left on the planet.

Double jeopardy: Wildlife and the Maasai

In terms of large mammal populations, ecological diversity, and expanses of relatively unspoiled wilderness, Tanzania's natural wealth is second to none. However, while Serengeti, Ngorongoro, and Manyara are well-known names and places, much of the nation's wildlife remains outside the nation's network of protected areas, sharing the land and its resources with resident human communities. In most of northern Tanzania these native people are the Maasai, a tribe of warriors and cattle herders who have occupied the area for several centuries. The Maasai are pastoralists and traditionally migrated semi-nomadically with their herds of livestock to wherever adequate pasture and water supplies could be

found. In the past several decades they have become considerably more integrated with the rest of Tanzania, assuming more sedentary lifestyles and becoming more agropastoral. Nevertheless, they remain one of the most culturally distinctive groups of people in East Africa, assimilating into the modern world only rather reluctantly.

However, it is becoming increasingly difficult for the Maasai and other indigenous peoples to maintain their traditional modes of living in the face of modern circumstances. Numerous changes have been brought to bear on their way of life as they are increasingly influenced by external commerce and other cultures, as well as being forced to comply with the directives of the nation that has emerged around them. Subject to the administrative structures of the Tanzanian state, Maasai communities have formed village governments, which in turn answer to district and national levels of the beauracracy. While their traditional system of administering their society with chosen leaders from each age class of men once held sway in tribal matters, communal leaders now answer to an array of government administrators who often share neither the Maasai's traditions nor their interests. Under the administration of the heavily centralized Tanzanian state the Maasai have become less and less free to make many of the decisions which affect their lives.

Land issues are among the central socioeconomic concerns for the Maasai due to the ecological requirements of their shifting pastoralist system, which utilizes various ranges depending on patterns of rainfall and drought. The Maasai have seen much of their territory lost to state-held ranching corporations, National Parks, and large agricultural plantations (Ole Parkipuny and Berger, 1993; Mwalyosi, 1992a). Tanzania's policy of compulsory vil-lagization throughout the nation in the 1970's, while providing communities with access to schools, health facilities, and water supplies, was an unmitigated economic disaster for many rural people (Scott, 1998). For the Maasai it meant an end to their nomadic move-ments in search of grazing resources and in many places compromised the viability of their mode of living (Ole Parkipuny and Berger, 1993; Mwalyosi, 1992b; J. Lendiy, personal communication). Without access to the large expanses of grazing land needed to support livestock in semi-arid environments with limited and unpredictable levels of rainfall, the sustainability of the Maasai way of life becomes quite tenuous if not impossible. Added to these problems is the unprecedented population growth that has occurred among Maasai communities in the past forty years due to reduced human mortality (Mwalyosi, 1990). The overall result is that in many locales throughout Maasailand per capita cattle holdings are dropping, and thus the Maasai communities become inexorably poorer with each passing year (Western, 1997, Mwalyosi, 1990).

These declining fortunes have caused the Maasai to consider non-traditional means of providing for their own survival. Reduced livestock holdings force communities to turn to other means of production. In many places, that has meant attempting to farm in highly marginal semi-arid lands with a limited agricultural potential (Mwalyosi, 1992b). Because of population growth and these troubling economic developments, many Maasai are also fleeing to urban areas where they have a chance to find employment as night watchmen or hawking jewelry and handicrafts on the street. Those unable to find work may simply become beggars. Given this scenario of rapidly declining socioeconomic sustainability among most of Tanzania's Maasai, alternative sources of communal and individual income are much needed.

Unfortunately, the wildlife-based enterprises such as tourism and safari hunting that bring so much revenue to the national coffers have been of little benefit to the Maasai. Indeed, the Maasai, like many other Africans, tend to be suspicious of conservation objectives, since their experience has mostly consisted of losing land to large national parks and reserves (LEAT, 1998). When lions and hyaenas take livestock and elephants kill people and destroy crops this only exacerbates the negative impacts of living around wild animals. Despite this, the Maasai have a long history of sharing the land with wildlife in a remarkably compatible manner (Collett, 1987; Homewood et al., 1987).

The primary threats to biodiversity and wildlife in Maasailand arise from illegal poaching and habitat loss due to conversion of land to agriculture. Alienation of agricultural land during colonial times converted numerous Maasai grazing areas to farmland (Ole Parkipuny and Berger, 1993). While the rangelands provide extensive habitat for native species, crop plantations do not and can seriously disrupt large mammal migrations and the functioning of ecosystems. Maasai farming plots are usually small subsistence holdings, and generally do not represent a significant source of habitat loss or wildlife decline. However, even such limited cultivation in semi-arid ranges can result in local environmental degradation (Mwalyosi, 1992b).

Illegal off-take of wildlife is a greater immediate threat to large mammal populations in Tanzania. Most of the wildlife poaching that currently occurs is not for ivory, as was so ubiquitous and widely publicized in the 1980's, but for game meat. While elephant populations have been increasing in many parts of Tanzania during this decade (Tanzania Wildlife Conservation Monitoring, 1999; S. Mduma, personal communication), species such as giraffe, buffalo, zebra, eland, and hartebeest are increasingly endangered in many locales by the demand for meat. In the greater Serengeti region, this is viewed as one of the chief threats to the ecosystem's long-term sustainability (Kauzeni, 1995; Sinclair, 1995).

In the cases of both conversion of land to agriculture and game poaching, it is the traditional inability of the Maasai to realize economic benefits from wildlife that poses the fundamental threat to the resource. When poachers come into Maasai territories, they rarely meet with local resistance and are sometimes aided, often for a fee, by the Maasai themselves. The Maasai in Tanzania have little or no experience with wildlife as a valuable resource that can serve their own interests; it is the property of the government, financial revenue derived from wildlife use mostly or entirely goes to the state, and therefore they do not place a positive value on wildlife's survival. The result is that without economic incentives to conserve wildlife and the ability to use it to benefit the community, the Maasai generally leave the resource at the mercy of unsustainable exploitation by poachers.

Tanzania's changing approach to conservation

In Tanzania, despite setting aside a remarkable network of protected areas that measures roughly 25% of the nation's land area (Ministry of Tourism and Natural Resources 1998), wildlife conservation has made little headway in genuinely involving local communities in the management of the resource. This is partly due to the country's strong history of centralized governmental authority, a legacy of Tanzania's socialist past. Recently conservationists

and bureaucrats in Tanzania have acknowledged many of the problems with this approach. Given the extreme paucity of resources available for enforcement, and the hostility that protectionist policies generate from local communities, such state-centered conservation efforts are doomed to failure in many areas (Baldus, 1994; Ministry of Tourism and Natural Resources, 1998). Wildlife will survive outside Tanzania's parks and reserves only if the people living on the land in rural areas take an interest in conservation out of their own self-interest.

This basic reality, encouraged by the tremendous recent popularity of community-based approaches (at least in name if not always in practice) among foreign donor agencies, has led Tanzania to revise its strategy for preserving the nation's wildlife heritage. Numerous projects have been initiated which attempt to increase the involvement of local people in natural resource management decisions and in generating economic returns from wildlife-based enterprises. This culminated in the new Wildlife Policy of the Ministry of Tourism and Natural Resources, issued in March, 1998. This policy expresses the need and intent to devolve usufruct rights and managerial authority to villages which display the capacity for assuming this responsibility. While this policy has not been implemented thus far and related legislation is still pending, the government has officially expressed its intention to significantly decentralize wildlife management throughout Tanzania. These developments present great opportunities for a critical change in the practice of conservation in Tanzania from one which is based on the monopolization of the resource by the state to one which strives to integrate wildlife into local human economies in a mutually beneficial manner.

Prospects for community-based conservation in Maasailand

Any local community possesses its own distinguishing economic, ecological, and cultural characteristics which jointly determine the prospects for community-level natural resources management to be a successful means of environmental conservation and of generating local income. In the case of the Maasai, many of these characteristics are particularly favorable to the coexistence of human and wildlife populations. The requirements of the Maasai pastoral economy, principally for large grazing areas, are complementary with the needs of many of the ungulates that inhabit these savannahs. While complaints of habitat destruction due to over-grazing and range degradation are often levelled at the Maasai, the evidence indicates that there are few negative effects on other wildlife populations from sharing the land with Maasai cattle (Runyoro et al., 1995; Collett, 1987; Homewood et al., 1987). Furthermore, traditional Maasai land use practices designate large stretches of land as dry season grazing reserves in order to ensure that ungrazed areas are available to their livestock during periods of stress. An unintended result of this practice is that these areas essentially function as wildlife reserves, uninhabited by people or cattle, for up to ten months of every year. Even when lions and other predators attack livestock, the Maasai kill only those particular animals which are responsible and generally do not attempt to eradicate predatory species on principle. Maasai pastoralism's compatibility with wildlife habitat requirements contrasts sharply with the agricultural practices of many other Tanzanian tribes, where the expansion of farming is rapidly degrading natural ecosystems. Perhaps just as important,

the Maasai traditionally do not eat wild animals, unlike most other neighboring tribes, who by now have severely depleted wildlife numbers in their areas due to human consumption.

The ecology of pastoralism is crucial for the coexistence of the Maasai and wildlife, but it is cultural factors that may play an even more important role with regards to community-based conservation. Unlike many Tanzanian and African tribes, the Maasai have retained a very high degree of communal homogeneity; even today it is unusual for a Maasai to marry someone from another tribe. Despite the imposition of outside ideas and interests on their communities, the Maasai have maintained most of their past traditions and societal institutions. This is essential in terms of having the capacity to communally manage natural resources such as wildlife. Community-based natural resource management assumes that a given group of people – the ‘community’ – exist who share common interests, have a sense of mutual responsibility, and have recognized and agreed upon structures of administration. Unfortunately, a century of rather shattering experiences, including colonialism and socialist villagization in Tanzania, has resulted in many self-governing tribal communities becoming reduced to more random aggregations of people who have few common interests and little sense of kinship [see Gillingham (1997) for a Tanzanian example]. In such cases effective management of a resource by a community is very difficult, because what we commonly think of as a ‘community’ does not actually exist. Because the Maasai have maintained more of their cultural integrity, at least relative to other tribes, they are more capable of cooperatively managing a communally owned resource. In fact, that is precisely what they have always done in terms of land management and grazing rights.

This sense of common group interests is essential in treating management issues such as poaching. Given the Maasai’s sense of communal unity and shared sense of identity, it is unlikely that poaching of wildlife will persist unopposed in areas where the Maasai are benefiting from the resource. Indeed, while bands of heavily armed poachers were wiping out Kenya’s elephant populations in the 1980’s, ivory poaching was held at bay in Amboseli National Park and Maasai Mara Reserve. This is largely attributed to the fact that local Maasai communities in these areas had a significant stake in the financial returns from tourism in these parks, and thus were opposed to illegal off-take of the animals (Western, 1994). Currently the main factor preventing wildlife throughout Maasailand from enjoying this protection is simply that few communities have had an opportunity to generate earnings from the resource.

Challenges to community-based conservation in Maasailand

While local resource management offers the possibility of more sustainable and pragmatic ways of addressing wildlife conservation, such approaches are by no means a panacea for the complex and multifaceted issues which are invariably involved. Although conservation policies are usually framed in ecological terms, the major challenges for both conservation and sustainable development in Tanzanian Maasailand are primarily socioeconomic and political ones. Many complicating factors derive from the way western aid projects have been conducted over the years and the attitudes among the Maasai that such approaches have fostered. Sustainability, a core principle of most current community-based conservation

initiatives, has often been overlooked, ignored, and even undermined by westerners seeking to improve the lives of rural Africans. A typical development project, such as a school or medical dispensary, is built with foreign money, often largely by foreign hands and for the benefit of local inhabitants. In Tanzania, where the provision of such basic social services was a central focus of the socialist post-independence government, locals have had virtually no role in maintaining, administering, or managing these facilities. The result is that outsiders provide social services to the Maasai community, be they western development agencies or the Tanzanian government, without designating any concurrent role or responsibility in these matters to the local beneficiaries. The somewhat perverse, but rather predictable, result is that the Maasai view the development of their own community as the responsibility of outsiders. When asked about their developmental priorities and ideas, the village leaders frequently stress the need to find donors to fund projects. A corresponding assumption among these communities is that the role of western organizations or community development workers is to bring gifts such as schools, water projects, livestock medicine, and so forth.

A main result of these western aid efforts in Maasailand and across Tanzania is that there is virtually no expectation of, or real aspiration towards, communal self-sufficiency. The notion that these communities could be funding their own development, rather than being dependent on outside sources, often seems to come as an unwelcome surprise to the villagers themselves. Of course, that is precisely the notion that advocates of community-based approaches both advocate and in turn depend on in order to achieve their long-term aim of sustainable resource conservation. If the Maasai are not motivated to provide their own communal funds for building social infrastructure, but believe that it is better or easier to let some willing donor provide for them, then it is unlikely they will be motivated to do much to protect the wildlife that can help earn these funds. Why put oneself in physical danger struggling to stop poachers when foreign donors are happy to provide the same developmental benefits that wildlife-based revenue offers? Of course, wildlife can be a fully sustainable resource for the utilization and benefit of Maasai communities, while foreign handouts are not, but that is a difficult concept for most rural African inhabitants to embrace.

In one predominantly Maasai village near the Tanzania-Kenya border there are ninety-four children who were unable to attend primary school last year because their parents are so impoverished that they could not even pay the modest annual school fee. In order to be able to send these children to school, village leaders solicited aid and attempted to find donors to provide the needed funds. At the same time, the village is earning several thousand US\$ every year from tourists that come and pay entrance fees upon arrival. Unfortunately, it seems that it has not occurred to anybody that this money could easily provide the needed revenue to cover the outstanding school fees; it is simply assumed that education is paid for by outsiders. Overcoming this attitude of apathy and dependency will be essential for conservation approaches which rely on community level incentives and grassroots management to succeed.

Cultural factors also play a key role in how a community will respond to conservation incentives, and whether community resource management will ultimately be sustainable. A danger in such matters is that westerners will assume that their own values also apply to radically different people such as the Maasai. For example, even the perception of cash among the Maasai is not the same as in the western world or many other African communities.

The currency of the Maasai has traditionally been, and to some degree remains, cattle, not printed or coined money. Certain members of the community may own herds of livestock with a value up to US\$100,000, yet they live in small mud huts and often have no cash at all in their immediate possession. The heart of Maasai culture and the driving force behind their economy has traditionally been the accumulation of cattle, rather than the use of cattle as a currency to obtain or consume other goods and services. Livestock has a social value which greatly transcends its 'market' price, a fact which has caused the GDP-focused Tanzanian government untold frustrations in their dealings with the Maasai. Consequently the Maasai cannot necessarily be expected to react to cash benefits from wildlife in the same way as other Africans who possess different cultural values. One result seems to be that when the Maasai do get some cash, they are particularly prone to spend the funds on alcohol, which has become a major social problem among many communities. The gradual and inevitable absorption of the Maasai into an external cash economy has undoubtedly fuelled this trend.

Regardless of the form of the received benefits from wildlife, it is essential that the members of the community recognize the source of that income if they are to take the expected steps to improve their stewardship of the resource. This means not only receiving revenue from tourism or other wildlife-related commerce, but making sure that the community as a whole not only benefits from these activities, but also accurately perceives that this income is connected to the populations and general ecological health of the area's wildlife. Some Maasai villages have earned significant sums of money from tourism already, but it often appears that there is little awareness among the general community as to the source of these earnings. The funds seem to be viewed as yet another gift or donation from an outside source, without any widespread sense of the villagers themselves having earned anything from their own resources. Thus the desired mental association between tourist revenues and wildlife does not occur across the social spectrum, and the incentive to conserve the resource does not develop.

More than anything else, conservation efforts depend on changing the relationship between the Maasai communities and the Tanzanian government with regards to the rights to manage and earn income from the area's wildlife. Given the concentrated central authority that has been the norm in Tanzania, the types of decentralization that community-based approaches require are largely at odds with the governing philosophy typically found amongst the Tanzanian elite. This bureaucracy, in addition to having become accustomed to wielding nearly complete managerial authority over natural resources such as wildlife, has also been enjoying the resulting financial benefits throughout the post-independence era. For communities to be able to utilize wildlife as an economic option and form of land use, the government will have to give up millions of dollars in annual earnings. The political corruption existing in Tanzania only makes this situation more challenging.

The future outcomes of community-based conservation efforts in Maasailand will largely be determined by the local villagers' ability to assert their own economic and political interests in their dealings with national and district governments. Most simply, it falls to the same fundamental questions of democratic expression and access to valuable resources that surround the lives of rural inhabitants facing corrupt and often indifferent bureaucratic establishments throughout much of Africa and the developing world. Are the voices of

these communities relevant or influential enough to the bureaucratic power structure to bring about meaningful change, or can their demands for increased control and self-determination still be brushed aside and ignored? Moreover, how can these people be encouraged to make themselves heard in an environment which has often trampled upon their rights and interests throughout recent history? Many Maasai consider their communal empowerment by the government with regards to wildlife and other resources to be a rather far-fetched dream. Nevertheless, it is these fundamental issues which pose the greatest challenges to both development and conservation issues among the Maasai and other Tanzanians.

Conclusion: Hope and uncertainty in Maasailand

Attempts to reconcile human economic needs with natural resources conservation, resulting in sustainable development and a win-win situation for all concerned, have generally met with mixed results, despite the popularity that such concepts have received among conservationists and donor agencies (Wells and Brandon, 1992). There is some sense in African conservation circles that community-based natural resource management has failed to fulfil its promise as a way of improving local conservation practices and bringing about sustainable management regimes (Shackleton, 1999). One problem arises from the promotion of 'community-based conservation', as with 'sustainable development', as a catchword that becomes less and less critically applied over time. Many attempts are currently being made to address conservation issues throughout the world which use community-based rhetoric, but do not necessarily proceed in less of a top-down manner than those of previous years. A central problem is that there remain few cases where communities have actually become meaningfully empowered in terms of being able to manage wildlife for profit. The widely heralded and groundbreaking CAMPFIRE program in Zimbabwe, which has enabled certain villages in that country to earn significant sums of money from safari hunting in a decentralized managerial framework, is fraught with many problems that seriously threaten its long-term prospects (Murombedzi, 1999). Lack of actual empowerment of village communities is among the primary obstacles. Under its current arrangement, the likelihood of CAMPFIRE bringing truly sustainable development and conservation of natural resources to rural unprotected areas in Zimbabwe is questionable. However, CAMPFIRE has made a great contribution to African conservation simply by providing an alternative to strictly centralized wildlife management at a time when few existed.

One unambiguous principle of community-based conservation is that effective strategies must be tailored to specific local conditions if they are to succeed. Even among individual Maasai villages there are varying economic and ecological factors that may dictate different outcomes for community resource management regimes. Conservationists must strive to obtain a truly grassroots orientation, with the interests of the human communities of primary consideration; far too often it is outside interests which are promoted by westerners and African governments at the expense of the local communities. Cloaking these motives in community-based rhetoric does nothing to make them less harmful or more legitimate. It is also counterproductive because ultimately anything which is not genuinely in the best

interest of the communities stands little chance of having a lasting positive impact on either people or the environment.

Maasai communities provide some of the best circumstances found anywhere for the successful implementation of community-based natural resources management. Until now most Maasai communities have mostly ignored wildlife; only recently have they begun to realize the extent to which it can benefit them. By promoting community empowerment and working with the Maasai to develop their means of profiting from wildlife-related businesses, conditions for wildlife across much of northern Tanzania may be greatly improved, and at the same time an important boost given to the Maasai's economic circumstances. The overall impact this could have on African wildlife conservation is considerable; the Maasai occupy some of the most important wildlife habitats in the world over a vast expanse of territory. Developing the Maasai's ability to capture the economic value of this resource will go a long way towards securing the future survival of the region's wildlife as well as human inhabitants.

Acknowledgements

Funding for the work that led to the drafting of this paper was provided by the WISDOM Foundation, including a contribution by the William and Mary Grieves Foundation. Helpful comments on drafts of this paper were provided by Robert H. Nelson, Jill Nelson, and David Pimentel. Thanks also to the Tanzania Wildlife Research Institute and the Tanzania Commission for Science and Technology for overseeing and supporting field research activities.

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