Abstract

A significant proportion of Kenya's tourism is wildlife-based and 44,000 km^2, representing about eight percent of the country's territory, has been set aside for wildlife protection. This has denied local communities access to invaluable herding and agricultural resources thereby creating conflicts between tourism and the well-being of local people who also suffer the destruction of life and property from wildlife. This paper probes government policies on the sharing of benefits from tourism with local communities in wildlife-protected areas. The analysis could provide lessons for other African countries where such conflicts are occurring. The findings show that although revenue-sharing has been initiated in some places, questions have been raised whether it is the local governments, communities or individual land-owners who should be compensated. So far, direct benefits to the landowners have been minimal. This has partly motivated certain communities to form wildlife associations with the aim of participating directly in tourism. This process is yielding some dividends but requires to be guided carefully in order to involve the majority of the local people in sharing in the benefits of wildlife management. Ultimately, this should motivate them to conserve wildlife even in the face of expanding human and animal populations in delicate ecologies.

Dr Isaac Sindiga is Associate Professor and Head of Department of Tourism, Moi University, Kenya.

Wildlife-based Tourism in Kenya:

Land use conflicts and government compensation policies over protected areas

Isaac Sindiga

Introduction

This article examines government revenue-sharing policies and actions for rural people who support wildlife conservation in national parks using the example of the administrative district of Kajiado and Narok, home of the renowned pastoral Maasai. It then discusses the response of local communities to these actions. This is a first step to suggesting strategies which encourage tourism and wildlife development while at the same time conserving the resources supporting tourism and generating benefits that sustain the welfare of the people living adjacent to tourism destinations (Kenya, 1994). The analysis could provide lessons for other parts of Africa where such conflicts obtain.

In Kenya, exclusive wildlife reservations were carved out of lands which were previously used by traditional pastoral peoples. These national parks and reserves which are now managed by the Kenya Wildlife Service (KWS) date back to the period immediately following the Second World War (Table l). They denied local people invaluable herding and agricultural resources and in some cases fishing rights thereby creating conflicts between the demands of Kenya's wildlife-based tourism and the well-being of local people who also continue to

Table 1: Kenya National and Marine Parks and Reserves.

National Parks	Area (Km2)	Year gazetted	District	Pastoral demand	Agricultural demand
1. Sibiloi	1,570	1973	Marsabit	Yes	No
2. Central Island	5	1983	Turkana/ Marsabit	No	No
3. South Island	39	1983	Marsabit	No	No
4. Malka Mari	876	1989	Mandera	Yes	No
5. Marsabit	360	-	Marsabit	Yes	No
6. Mount Elgon	169	1968	Trans Nzoia	Yes	Yes
7. Saiwa Swamp	2	1974	Trans Nzoia	No	No
8. Meru	870	1966	Meru	Yes	No
9. Kora	1,787	1989	Tana River	Yes	No
10. Mount Kenya	715	1989	Nyeri/Meru	Yes	Yes
11. Ndere Island	4	1986	Kisumu	No	No
12. Mau[a]	-	-	-	Yes	Yes
13. Lake Nakuru	188	1967	Nakuru	Yes	Yes
14. Aberdares	715	1950	Nyeri	Yes	Yes
15. Ruma	120	1983	Homa Bay	Yes	Yes
16. Hell's Gate	68	1984	Nakuru	Yes	No
17. Longonot	52	1983	Nakuru	Yes	Yes
18. Fourteen Falls[a]	-	-	-	No	No
19. Ol Donyo Sabuk	18	1967	Machakos	Yes	No
20. Nairobi	117	1946	Nairobi	Yes	No
21. Amboseli	392	1974	Kajiado	Yes	No
22. Tsavo West	9,056	1948	Taita-Taveta	Yes	Yes
23. Tsavo East	11,747	1948	Taita Taveta/ Kitui	Yes	Yes
24. Arabuko Sokoke	6	1991	Kilifi	No	Yes
25. Chyulu	471	1983	Machakos	Yes	Yes
Marine Parks					
26. Malindi[b]	6	1968	Kilifi	No	No
27. Watamu[b,c]	10	1968	Kilifi	No	No
28. Mombasa[b]	10	1968	Mombasa	No	No
29. Kisite[b]	28	1978	Kwale	No	No
National Reserves					
30. Marsabit	1,198	1962	Marsabit	Yes	No
31. Nasolot	92	1979	West Pokot	Yes	No
32. South Turkana	1,091	1979	Turkana	Yes	No
33. Losai	1,806	1976	Marsabit	Yes	No
34. Kerio Valley[a]	-	-	-	Yes	No
35. Kamnarok	88	1983	Baringo	No	No
36. Kakamega	4	1985	Kakamega	Yes	Yes
37. Lake Bogoria	107	1970	Baringo	Yes	No
38. Samburu	165	1963	Samburu	Yes	No
39. Shaba	239	1974	Isiolo	Yes	No
40. Buffalo Springs	131	1963	Isiolo	Yes	No
41. Bisanadi	606	1978	Isiolo	Yes	No
42. Rahole	1,270	1976	Garissa	Yes	No
43. North Kitui	745	1979	Kitui	Yes	No
44. Mwea	68	1976	Embu	Yes	Yes
45. Maasai Mara	1,510	1974	Narok	Yes	Yes
46. South Kitui	1,833	1979	Kitui	Yes	No
47. Arawale	533	1974	Garissa	Yes	No
48. Boni	1,339	1976	Lamu	Yes	Yes
49. Dodori	877	1976	Lamu	Yes	Yes
50. Tana River Primate	169	1976	Tana River	Yes	Yes
51. Shimba Hills	192	1968	Kwale	Yes	Yes

(cont.)

suffer the destruction of life and property. Kenya provides an African example where there is "the clearest relationship between the business of tourism, the demands of land of an ever increasing population, and the conservation of delicate ecologies" (Economist Intelligence Unit, 1991, p. 64). Below, the paper discusses the contribution of tourism to Kenya's economy. This is a prelude to explaining the conflicts generated by wildlife-based tourism in Kenya.

Tourism in Kenya's economy

Kenya's tourism industry is relatively well developed. Tourism is the country's leading foreign exchange earner and a significant portion of this tourism is wildlife-based (Kenya, 1979, 1989, 1994a). The tourism industry generated KSh.24,440 million (approximately US$421 million) in earnings in 1993, and KSh.28,100 million (US$484 million) in 1994 (Kenya, 1995). These earnings represent roughly 35% of the country's total foreign exchange earnings in a year. The number of visitors rose from 826.2 thousand in 1993 to 863.4 thousand in 1994 (Kenya, 1995). Many visitors go to the country's national parks and reserves for wildlife safari tourism (Table 2).

The wildlife component yields substantial and increasing economic returns. However, the major proportion of tourism expenditures remains with entrepreneurs elsewhere, far removed from communities adjacent to the country's parks and reserves (Burnett & Conover, 1989; Sinclair, 1992; Sindiga, 1984, 1994). Tourism may bring in "hard" currency and help a nation to balance its accounts, however, the local consequences of tourism development are often neglected. For decades, wildlife's impact on local people was ignored thereby generating resentment to parks and reserves, and to tourism (Akama, Lant & Burnett, 1995; Olindo,

Table 1 (cont.)

Agricultural National Parks	Area (Km2)	Year gazetted	District	Pastoral demand	demand
Marine Reserves					
52. Kiunga[b,c]	250	1979	Lamu	No	No
53. Malindi[b]	213	1968	Kilifi	No	No
54. Mombasa[b]	200	1986	Mombasa	No	No
55 Watamu[b,c]	32	1968	Kilifi	No	Yes
56. Mpunguti[b]	11	1968	Kwale	No	No
National Sanctuary					
57. Maralal	6	1968	Samburu	Yes	No

Notes: [a] in process in gazettement
[b] there is demand for fishing on these areas by the local population
[c] local demand for forest products exist in these places Sources:
Kenya Wildlife Service, 1990, p.vii;
Nyeki, 1992, pp.90-101;
field observations.

1991). Local communities make demands to use park resources, for pastoral or agricultural development; in addition, marine protected areas are desired for fishing and, in some places for forestry products (Table 1).

Wildlife based tourism

Kenya has 57 protected areas dispersed widely across the country (Table 1). These parks and reserves are the basis of Kenya's thriving wildlife safari tourism. Two other major attractions are coastal beaches, and museums and archaeological sites. Most tourists, however, combine wildlife safari with "sun, sand and sea" perhaps because of the proximity of wildlife areas to the coast (Dieke, 1991).

Kenya's tourism developed on the basis of up-country wildlife conservation in national parks and reserves. These wildlife areas became important tourist destinations especially for visitors from North America and the United Kingdom. Initially most tourists came for big game hunting, collection of trophies, sport-fishing and generally experiencing the wild in habitats preserved in a near-natural state. In the contemporary time, game hunting is banned in Kenya and the tourists come to see the animals and make photographic safaris. However, significant tourist traffic is going to the Indian Ocean coast. This beach tourism draws most of its clientele from Western Europe, mainly Germany, Italy, and Switzerland.

Table 2: Number of Visitors to Selected Kenya National Parks and Reserves, 1990-1994.

	'000s				
	1990	**1991**	**1992**	**1993**	**1994[a]**
Nairobi	152.8	168.8	156.4	164.6	163.2
Animal Orphanage	213.8	217.6	173.2	155.3	182.0
Amboseli	237.2	198.2	168.3	121.1	159.5
Tsavo West	78.6	119.3	103.1	102.9	105.4
Tsavo East	127.7	135.9	125.5	135.8	132.4
Aberdares	66.6	56.3	63.6	60.8	60.2
Buffalo Springs	-	-			
Lake Nakuru	174.2	174.4	139.8	178.6	164.3
Maasai Mara	180.5	143.3	138.1	133.1	138.2
Malindi Marine	35.6	33.0	44.2	41.1	39.4
Lake Bogoria	53.8	53.0	39.4	37.2	43.2
Meru	11.1	9.1	7.1	7.4	7.9
Shimba Hills	60.0	38.2	31.9	24.8	31.6
Mount Kenya	18.7	14.6	15.5	18.0	17.2
Samburu	-	-	-	21.5	9.2
Kisite/Mpunguti	27.1	33.1	28.0	27.5	34.8
Mombasa Marine	29.1	54.6	57.8	43.3	48.0
Watamu Marine	20.5	22.0	27.0	31.7	32.1
Hell's Gate	31.1	41.3	34.2	47.4	44.9
Impala Sanctuary, Kisumu	-	-	-	59.1	5.5
Others[b]	13.8	14.8	14.0	16.6	9.6
Total	**1,532.2**	**1,518.5**	**1,367.1**	**1,927.8**	**1,428.6**

Notes: [a] Provisional returns
[b] Includes Mount Elgon, Ol-Donyo Sabuk, Marsabit, Saiwa Swamp, Sibiloi, Ruma National Park, Mwea National Reserve, Central Island National Park, Nasolot National Reserve and Kakamega National Reserve.
Sources: Kenya, 1994b, p. 177; Kenya, 1995, p. 167

Presently, Kenya's parks and reserves cover about 44,000 km^2 or about 8 percent of the country's land area (KWS, 1990). Most protected areas are located in the arid and semi-arid areas; a zone that comprises over 87 percent of the national land. This region experiences low and unreliable rainfall and very high evapotranspiration rates. It cannot support substantial cultivation and resident communities practise one or another form of pastoralism (Sindiga & Burnett, 1988).

The parks and reserves are at varying levels of development. The tourism industry uses only about two dozen of them (Table 2). The most visited protected areas are Lake Nakuru, Maasai Mara, Amboseli, Nairobi and Tsavo. The visitor capacity in

both Maasai Mara and Amboseli as well as several other protected areas has been exceeded given the current level of park infrastructure. In fact, lodges and camps have proliferated especially in Amboseli and Maasai Mara.

Categories of protected areas in Kenya

Wildlife conservation areas are designated as National Parks/ Marine Parks and National Reserves/Marine Reserves; in addition, there are game reserves. This categorisation implies a concept of the ownership and management of wildlife conservation areas which is important for the later discussion on policies for the distribution of benefits accruing from wildlife. National parks are essentially state lands which are managed exclusively for the conservation of fauna and flora (Kenya, 1975, 1985a, 1989). Among the objectives are to preserve these resources for aesthetic, scientific and cultural reasons; to provide educational and recreational facilities; to provide attractions for tourists and serve as a major basis for the economically profitable tourist industry; and to sustain such other activities as commercial photography and to act as water catchments (Kenya, 1975). As such, wildlife management in Kenya has numerous stakeholders (Table 3). Certain activities, in particular cultivation, pastoralism, timber harvesting and consumptive wildlife utilisation (sport hunting, live animal capture, cropping for meat and trophies, and game ranching) are excluded from national parks (Kenya, 1975, 1985a). Kenya banned sport hunting in 1977 followed by an embargo on curio and animal parts in 1978.

In terms of financial arrangements, all receipts by National Parks from tourism and wildlife activities go to the KWS which is the custodian of all wildlife in Kenya. Taxes on tourist expenditures, however, go to the central government. Also, the KWS shares surplus park revenues with local authorities although this aspect has proved controversial; as will be shown below under revenue sharing.

In contrast, National Reserves are created on any type of land. They are declared by the government with the consent of the relevant local authority. Their objectives are similar to those of parks except that other land uses by local communities and others may be specifically and conditionally allowed. Finally, county council game reserves are similar in many respects to national reserves. The game reserves are declared and managed by county councils or any other local government (Kenya, 1975). Local authorities collect gate fees from National Reserves; in all cases the KWS collects licensing fees for tourism facilities located in protected areas.

Marine parks are somewhat like national parks in both administration and management. They are restricted to the Indian Ocean coast and start at the highest spring water mark and extend to some distance into the sea. These parks are of varied sizes. The marine national reserves extend beyond the parks. They are managed by the Kenya Wildlife Service. So far, local authorities have not been involved in their management although they share in the revenues. Certain types of fishing are allowed in the marine reserves.

The establishment of marine parks and reserves was intended to conserve fragile marine ecosystems. It was realised that tourists had invaded coral gardens in the reefs to collect corals and shells thereby exploiting ornamental marine life (Musyoki, 1992). In addition, coral gardens had become important venues for snorkelling. These activities could lead to the

Table 3: Stakeholders in Wildlife Management in Kenya.

1.	Local wildlife associations
2.	Individual landowners
3.	Group landowners
4.	Trustees of communally owned lands
5.	Individual ranchers
6.	Government of Kenya
7.	Kenya Wildlife Service
8.	Forestry Department
9.	Fisheries Department
10.	Geology and Mines Department
11.	Departments of Agriculture and Livestock Development
12.	Department of Tourism
13.	Kenya Tourist Development Corporation
14.	Water Department
15.	District Development Committees
16.	Local authorities especially county councils
17.	National parks and reserves
18.	Hoteliers and tour operators
19.	Beach operators
20.	Women's groups
21.	Community enterprises
22.	Game ranchers
23.	Local non-governmental organisations
24.	International non-governmental organisations
25.	International community
26.	The scientific community
27.	The people of Kenya including generations unborn
28.	Entertainment industry

Source: Modified from KWS, 1994, p.29.

Table 4: Causes of Wildlife-Human Conflict.

1. Loss of and damage to crops
2. Damage of forest trees and seedlings
3. Injury and/or loss of human life
4. Loss of livestock
5. Competition with livestock for pasture and water leading to resource degradation and water abuse
6. Destruction of infrastructure (fences, pipes, works, housing)
7. Competition for space (protected areas) with communities
8. Hosting and transmission of livestock diseases
9. Lack of direct utility of wildlife
10. Invasion of urban areas leading to insecurity and loss of freedom
11. Misbehaviour of KWS Rangers - shooting and whipping people
12. Misconception of KWS as a philanthropic or donor agency leading to very high expectations
13. Ineffective techniques for controlling problem animals
14. No compensation for destruction of property by animals
15. Low compensation for people killed by animals
16. Inefficiency and abuse of compensation procedures
17. Competition and lack of involvement in tourism business
18. Uncontrolled animal movements and migrations
19. Conflicts of interest over benefits accruing from wildlife based tourism.
20. Licensing problems among operators of wildlife-related tourism activities
21. Security/safety of tourists in protected wildlife areas
22. Policy weaknesses causing uncertainty in potential investors
23. Land-use conflicts and inadequacy of policy resolution
24. Illegal hunting and trade in wildlife products
25. Denial of a share of revenue and other benefits to stakeholders
26. Poverty of local populations
27. Negative social impacts of tourism (prostitution, alcoholism, drug peddling, scant dressing etc.)
28. Negative environmental impacts of tourism (overcrowding, animal harassment, garbage and sewage disposal, pollution etc.)
29. Population pressure
30. Foreign ownership and management of tourism enterprises leading to local resentment.
31. Poor employment opportunities usually in servile positions and seasonal nature of tourism jobs.

Source: KWS, 1994, p. 27.

degradation of these marine resources.

Human-wildlife conflicts

There are a myriad of causes for wildlife-human conflicts in Kenya (Table 4). For the purpose of this article, emphasis is on the aspects of conflicts relating to resource use. This is because the primary sources of conflict are "the enormous losses, costs and fear wildlife causes by destroying property and killing humans" (KWS, 1994, p.3).

The issue of land use conflicts has come to the fore in Kenya because of a rapidly growing, essentially rural population. Increasing at a rate of about 3.5 percent per year, population pressures have built up in the ecologically better endowed highland areas. To release the pressures, people have spontaneously moved downslope to the rangelands and established dense settlements thereby destabilising traditional pastoral ecosystems. Setting aside land for national parks and reserves contributed to the problem as Kenya's rangelands hold more than 50 percent of the country's livestock and 25 percent of the human population (Kenya, 1994). The result is the competitive demands for land resources to support wildlife and livestock leading to conflicts, ecological degradation and poverty. When this happens

> *subsistence poaching increases, and parks are scavenged for wood and other plant material, honey and water. If law enforcement is not diligent, grazing follows, and eventually farming* (Burnett & Conover, 1989, p. 257).

This threat to wildlife habitats is already a serious problem in Africa (Kiss, 1990). Unless creative programmes which allow for wildlife management and the development of rural peoples are established, conservation reserves cannot exist amidst hostile neighbourhoods.

Wildlife are also to be found in areas outside the parks and reserves in the so-called dispersal or migration areas where local people are not allowed to kill them. In addition, wild animals migrate seasonally, going to higher altitude areas or swamps in the dry season and wandering throughout the plains in the wet season. Without access to private land in dispersal areas, "wildlife populations would crash" (KWS, 1990, p. 15). Nearly all parks and reserves including Amboseli, Maasai-Mara and Nairobi are dependent on dispersal areas for the survival of wildlife. An aerial count by the World Wildlife Fund done in May 1993, for example, showed that out of 1610 elephants (*Loxendonta africana*) in the Maasai Mara, some 415 (or about 26 percent) were in dispersal areas; and of the 10,640 buffaloes (*Syncerus caffer*), 2241 (21 percent) stayed outside the reserve (Mbugua, 1994). This wildlife reliance on dispersal areas can be explained by the fact that no park or reserve is a self-sufficient, all encompassing ecosystem. In a sense, dispersal areas act as buffer zones between wildlife and human settlements (Campbell, Huish & Kajuni, 1991).

In general, wild animals are better suited to rangeland grazing resources than livestock. Whereas wild animals eat many grass and plant species, livestock are selective grazers. This

provides wild animals with an advantage over livestock in the competition for range resources. The proximity of wild animals hinders effective grazing management by livestock. Wild animals make it impossible to practise deferred rotational grazing which is the key to traditional pastoral systems.

It begs reiterating that human settlements have already expanded to dispersal areas. A mix of land uses including cultivation has developed. This further reduces the amount of land available for wildlife all year round, a problem hardly unique to Kenya; it has been reported from other African countries as well (Campbell, Huish & Kajuni, 1991).

Wild animals are a menace to livestock, crops, and people. Where cultivation is done large herds especially of buffalo destroy crops. The annual migration of wildebeest (*Connochaetes taurinus*) in the Maasai Maraand Loita plains to and from the Serengeti National Park in Tanzania means that the Maasai livestock must compete with wild animals for range resources. Wildebeests migrate in large herds; herds of 10,000 and more are not unusual in the Serengeti (Pratt & Gwynne, 1977). These numbers make it impossible for livestock to compete for resources.

Successful livestock breeding depends on effective control of diseases. However, this has not been easy to do in Maasailand because of the presence of wild animals. The latter have immunity over dangerous livestock diseases and carry these without being affected. These diseases which include foot and mouth disease, East Coast fever, malignant catarrh fever, rinderpest, pleuro-pneumonIa and nagana are a bane to the Maasai herder.

The foregoing discussion demonstrates that local communities pay a heavy price for supporting wildlife protection areas.

Do the resident communities benefit from tourism? What are the institutional arrangements for revenue sharing and compensation for the local people?

Revenue sharing and compensation

Directing greater economic benefits from parks to local people is an expressed goal of the Kenya government (Kenya, 1975, 1979; KWS, 1990). The principles underlying revenue sharing are

1. that local people bear the cost of wildlife conservation by tolerating crop and livestock losses, and foregoing potential income from alternative land uses and

2. that local communities will continue supporting parks and reserves if they are seen to assist in people's development (KWS, 1990).

It follows that wildlife-based economic activities should provide economic incentives for conservation both in the short- and long-term (KWS, 1990). As such, wildlife should be compatible with such other land uses as tourism, livestock, harvesting forest products and even cultivation.

In pursuit of the above objectives, the Kenya government has called for revenue sharing with landowners adjacent to the parks, and relevant local authorities; and direct compensation for loss and injury to people; and community participation in wildlife management. Each of these strategies has proved difficult to implement.

Initially the government made compensation payments for damage to property (crops and livestock) to landowners in the wildlife dispersal areas. These much-criticised payments were scrapped in 1990. The compensation procedures were always cumbersome and took several years. In addition, landowners frequently falsified claims. The programme proved difficult to implement leading to its discontinuance. However, the wildlife conservation authorities must strengthen protection of livestock and crops from damage by wildlife. This appears difficult to achieve in view of the fact that a large number of wild animals (about 70%) lives outside the protected areas. Despite this knowledge, a controversial electric fencing programme of protected areas has been initiated by the KWS. Already, Lake Nakuru National Park has been fenced and work is going on elsewhere including the Aberdares Park and the Shimba Hills Reserve. This is likely to be insufficient as a conflict resolution mechanism and it may prove ecologically disastrous. In lieu of compensation for crop and livestock losses, landowners may have to change to land uses that are compatible with wildlife. Perhaps tourism and related activities such as curio-making and handicrafts could be considered as alternatives. It must remain a mute point, however, whether traditional livestock cultural groups can abandon their primary livelihood

Compatibility between wildlife and other land uses is basic to local communities and their future support of wildlife tourism

system and adopt a new lifestyle.

Revenue-sharing and community participation

The KWS has a revenue sharing programme with communities using park entry fees (KWS, 1990). The main beneficiaries of this scheme are landowners in wildlife dispersal areas outside a park or reserve. However, landowners adjacent to fenced National Parks or Marine Parks receive little or no payment because, in the view of the KWS, they do not incur any opportunity costs (KWS, 1990).

In spite of the policy to share revenues with landowners, there is no fixed proportion of revenues from a park that a local community is expected to get. The Kenya Wildlife Service "reserves the right to decide who receives what from revenue sharing" (KWS, 1990, p. 51). This has caused much resentment against wildlife. It is in this context that the Maasai community leaders have complained about wildlife and tourism.

In December 1993, Maasai leaders in the area surrounding the world famous Maasai Mara National Reserve and led by the area member of parliament, threatened to kill elephants and other animals found outside the reserve boundaries. They complained of the destruction of life and property by rogue elephants and buffaloes and the inability of the KWS, then under its first director Richard E. Leakey, to contain the wildlife within the reserve. On December 23, 1993, William ole Ntimama, a member of the Kenya cabinet as minister for local government and himself a Maasai from Narok district, added his voice to the wildlife menace on local communities. He pointed out that in the previous two years, elephants had killed 16 people and maimed scores of others from Narok town area alone (*The Standard*, December 24, 1993).

Minister Ntimama accused the KWS of insensitivity to the plight of the Maasai. He claimed that the KWS dismissed

> *every legitimate claim that we put to them as cheap Narok politics. According to them (KWS), it is not only the politics of Narok that is cheap, but also the lives of the people because they recommend KSh.30,000 (about US$430) compensation for loss of human life* (*The Standard*, December 24, 1993, p. 2).

These media reports may not tell the full story. They indicate nevertheless that all is not well with wildlife management in Kenya. In fact, the failure of the KWS in forging strong local community and institutional linkages for wildlife conservation and its apparent insensitivity to resolving local concerns led to the premature departure of Richard Leakey from the organisation in 1994.

Current compensation is low and unacceptable to community groups

The major complaints against the KWS may be summarised. The compensation for loss of life is inadequate; also, the processing of claims is too slow. In addition, local people do not obtain compensation for loss of property. Payments of compensation to property were discontinued in 1990.

The current rate of 25 percent of gross park fees ceded to a local authority is deemed to be too low. Residents are clamouring for more equitable revenue sharing (Sindiga, 1992). There are also complaints about non-remittance of the 25 percent gate fees to the affected local county councils. Finally, the KWS is accused both of inaccessibility and lack of accountability to local communities. Specifically, local people argue that they are not represented on the board of trustees of the KWS. This is seen as insensitivity to local problems related to wildlife and tourism. The case of Maasai Mara reserve and the Amboseli park where revenue-sharing has been in operation for several years is instructive. Maasai Mara, with an area of 1510 km^2 is normally viewed as one eco-unit with the Serengeti National Park of Tanzania. The Mara is characterised by open grassland mixed with riverine forests and is quite rich with an estimated herbivore population of 237 per km^2. It was initially popularised as a reserve to see the "big five", namely elephant, lion, cheetah, leopard and rhinoceros.

Amboseli is a rather small park which has suffered significant overgrazing by livestock and wild animals. The very heavy tourist traffic into Amboseli has not helped matters. The park lies at the foot of Mount Kilimanjaro, which, at over 5790 metres altitude, has permanent snow-capped peaks, and is a source of the perennial springs of the Amboseli.

Maasai Mara falls under the jurisdiction of Narok County Council. This has made it possible for the council to collect money and pay it directly to landowners in wildlife dispersal areas as part of revenue-sharing. Since 1989, Narok County Council has been levying a fee of KSh.50 from every visitor to the reserve and paid to the neighbouring group ranches through a trust fund established for the

purpose (Sindiyo, 1992). This money ceded to group ranches represents some 20 per cent of the gate fees. The money has been put to community projects such as schools, health centres, cattle dips and other services.

In the case of the Amboseli, the neighbouring Maasai people are supplied with piped water from springs located inside the park (Gakahu, 1992). Also, the government collects gate fees and then shares out the revenue with the local county council which would then finance local community projects. Thus, in Amboseli, revenue-sharing does not go to landowners specifically and this is a cause for discontent. Also, it appears that the water is piped because of the park and not the local people. Although there are some claims that local Maasai hostilities against wild animals have decreased (Hadley, 1994), living conditions in the neighbourhood of the park have not improved. The conflicts between park authorities and the local people appear to be far from resolved (Talbot & Olindo, 1990).

The Maasai Mara dispersal area is quite large, covering some 3,400 km^2 (Sindiyo, 1992). This area has many landowners thereby increasing the potential for future conflict on revenue sharing among them. And like Amboseli, the revenue from the reserve is not paid to landowners but serves as a tax waiver to the community. Finally, the KSh.50 fee levied on a tourist visiting the Maasai Mara is probably too low to meet a private landowner's costs.

But the Maasai Mara example is atypical. Its management status is in flux. Mara's land resource is governed by the county council but the wildlife is under the KWS. This makes it hard to plan a programme of development and financial investment in the reserve.

Unless the management problem of the Mara is resolved, the infrastructure in the reserve can be expected to deteriorate and tourism activities will likely be put in jeopardy. Perhaps as Western (1992) suggests, some form of management board will be required to oversee Mara's affairs. Such a board should comprise of professional people on wildlife management and tourism and recognised local leadership to take care of community interest in the wildlife-based tourism enterprise.

Response of local communities to revenue sharing

The programme of revenue-sharing in the Maasai Mara and Amboseli has fallen short of expectations (Gakahu, 1992). It has failed to compensate the producer, that is, the individual landowner in the dispersal areas. This has spurred community efforts aimed at direct participation in tourism activities with a view to earning greater incomes. Local people have organised themselves to create income generating activities. These include providing

1. camping concessions and exclusive camp sites,
2. public camp sites and other low-cost accommodation,
3. leases or partnerships with lodge and hotel operators,
4. guiding tours, and
5. supplies and services to lodges. (KWS, 1990).

In addition, certain consumptive utilisation of wildlife may be permitted to private landowners such as bird shooting, game cropping and hunting for home consumption subject to obtaining a license and possessing required skills and equipment (KWS, 1990).

Some of these activities have been developed in areas adjacent to the parks and reserves. It is expected that these initiatives will increase incomes to rural people by spreading wildlife-generated tourism benefits (Kenya, 1979). At the Maasai Mara for example, 10 of the 16 developed camps or lodges are located on private ranches outside the borders of the national reserve (Tuya, 1992).

Members of some group ranches in the wildlife dispersal area of the Maasai Mara have organised themselves and formed the Ol Choro Oirouia Wildlife Association, an indigenous conservation group which is to act as a management group for their land. The group collects wildlife viewing fees from tourists and distributes the proceeds to the membership. They appear to make a substantial amount of money each year. Other group ranches which border the Maasai Mara are planning to form their own associations.

The group ranches around Amboseli National Park including Olgulului Ololorashi, Mbirikani, Kimana and Selengei and those close to the Tsavo West National Park (Rombo and Kuku) are planning to draw up agreements with the KWS in order to protect their rights and to be compensated for protecting wildlife (*Kenya Times*, 21 January 1994). Such agreements will be done by wildlife associations planned on the model of Ol Choro Oirouia.

The emergence of wildlife associations by indigenous people is to be encouraged. It will sustain the wildlife conservation ethic and discourage poaching. Reports from Ol Choro Oirouia indicate that the association has employed a security team of trained scouts. Also, the associations are beginning to attract support from international conservation groups and other stakeholders in tourism. A group known as Friends of Conservation has offered to build and equip two primary schools libraries in the area covered by Ol Choro Oirouia;

and African Safari Club will build and equip a secondary school (*Daily Nation*, 25 January 1994).

Conclusion

This study has shown that communities adjacent to National Parks and National Reserves pay a price for the conservation of wildlife through the loss of farming land, agricultural crops, livestock, and loss and injury to people. Over the past few years, the KWS has encouraged the sharing of revenues generated from wildlife-based tourism between government at all levels and local communities. Such sharing started with the Amboseli National Park and the Maasai Mara National Reserve in 1989 and is expected to be extended to all other parks an reserves. However, the KWS has not specified who is to be compensated and how much is to be paid and when. This leaves little room for local communities to negotiate with the KWS on the opportunity cost for their support for wildlife. Such a policy decision by the KWS appears absolute and arbitrary. The local communities have no avenues of channelling their grievances on this matter. Also, the KWS decision not to share revenue with communities adjacent to fenced parks is equally arbitrary.

Questions have also been raised on what proportion of tourism revenues the KWS (and the central government) should give to local authorities. Is the level of 25% of gross gate fees collected sufficient? What is the 'right' level of compensating local authorities? Yet ceding money to a local authority in which a park or reserve is located is not the same thing as sharing tourism revenues with local people who support wildlife and it is certainly not the same thing as compensating the producer. In fact, local authorities are not necessarily any more efficient than the KWS or the central government. They are known to keep resources belonging to local people for long periods. On this score, local authorities are equally insensitive to the needs of local people. Local authorities such as county councils put tourism revenues into their general bank accounts and use the money to balance their budgets and pay recurrent operational expenses. There is no specific requirement that part of the revenue be used for wildlife conservation and improving the tourism infrastructure.

Local authorities, of course, obtain greater revenues from National Reserves which they own. But local authorities have little capacity to develop and maintain reserve infrastructure such as roads, fences, security of the wildlife and tourists; and to sustain ecologically fragile environments. The overcrowding in the Mara is a case in point. The KWS is in a better position to do these functions in terms of resource capacity, personnel and financing.

The policy intention of sharing tourism revenues directly with landowners has proved easier said than done. So far, direct benefits to local people have been minimal. This partly has motivated certain communities to form wildlife associations to participate directly in tourism. This action is yielding dividends. However, not all landowners are involved. Local wildlife conservation and management associations are characteristically elite groups which monopolise the benefits from tourism. The majority of the local people need to be educated on how they can participate fully in sharing the tourism resource thereby being motivated to conserve wildlife. This is the idea of community participation in tourism management. It may be noted though that local people have little, if any expertise in contemporary wildlife conservation and tourism management (Dieke, 1993).

Also, planning is required to integrate national tourism demands with local needs with a view to enhancing wildlife conservation and sharing revenues and other benefits accruing more equitably. Such planning must also address the issues of the ownership, management, and coordination of National Reserves. At present, a county council can levy whatever fees it wishes to allow tourists to enter a national reserve. Local wildlife management associations operating on private lands adjacent to national parks and national reserves impose their own fee rates as well. This is to be encouraged. As the wildlife associations proliferate, competition will increase and only those offering quality services will survive to the advantage of tourists. However, the KWS and other tourism authorities should anticipate a multiplication of groups erecting barriers to levy charges to tourists without providing any services. Too many fees collection centres could become cumbersome and trigger negative reactions among travellers and tour operators.

Planning should identify who bears responsibility for park or reserve development. Who should plan new lodges and camping sites, for example? Who should determine the optimum number of a given facility in a reserve or park? How can the interests of local people be met?

Compensation for loss and injury from wildlife is an emotive issue among residents adjacent to parks and reserves. Complaints are raised that processing of compensation claims is too slow. Actual settlements are too low and do not even reflect market values. Compensation tends to be partial covering only certain losses and not others.

It is not clear what role KWS plays in compensation for loss and injury. Who is responsible? The matter of procedures and responsibilities for compensation ought to be clarified by relevant

authorities. Nonetheless, whatever compensation packages are put in place will be inadequate for conflict resolution involving humans and wildlife. The conflicts can be minimised but certainly not eliminated.

Finally, population pressure is increasing in the rangelands because of relatively large human and livestock populations and wildlife. The human settlements are becoming dense and the cultivation frontier is expanding in areas of delicate ecologies. This demand for land is sending distress signals to planners and policy-makers dealing with wildlife-based tourism. Tourism planning and development plans must seriously address the issue of increasing population, and expanding settlements and wildlife conservation. Only then can wildlife-based tourism in Kenya be sustained.

It is fortuitous that during the 1994-96 development plan period, the government will support the KWS efforts in the

> *planning, development and management of protected areas under its jurisdiction and in seeking solutions to conflicts arising between the demand for the wildlife conservation and the competing interests of the landowners and the local communities living within or near wildlife protected and dispersal areas* (Kenya, 1994a, pp. 195-196).

This work will be aided a great deal after the proposed National Tourism Development Master Plan is produced. It is expected that the master plan will provide a harmonised regulatory framework for addressing extant land use conflicts related to tourism (Kenya, 1994c).

References

Akama, J.S., Lant, C.L., and Burnett, G.W. (1995). Conflicting attitudes toward state wildlife conservation programs in Kenya. *Society and Natural Resources, 8*, 133-144.

Burnett, G.W., & Conover, R. (1989). The efficacy of Africa's National Parks: An evaluation of Julius Nyerere's Arusha manifesto of 1961. *Society and Natural Resources, 2*, 251-260.

Campbell, K.I.I., Huish, S.A., & Kajuni, A.R. (Eds.) (1991). *Serengeti National Park Management Plan 1991-1995.* Arusha: Tanzania National Parks.

Daily Nation (1994). Wildlife Group Sue Narok Council. *Daily Nation* (January).

Dieke, P.U.C. (1991). Policies for tourism development in Kenya. *Annals of Tourism Research, 19*, 69-90.

Dieke, P.U.C. (1993). Cross-national comparison of tourism development: Lessons from Kenya and the Gambia. *Journal of Tourism Studies, 4*(1), 2-18.

Economist Intelligence Unit. (1991). *EIU international tourism reports No. 2 Kenya.* London: EIU.

Gakahu, C.G. (1992). Participation of local communities in ecotourism: Rights, roles and socio-economic benefits. In C.G. Gakahu & B.E. Goode (Eds.), *Ecotourism and sustainable development in Kenya* (pp. 117-123). Nairobi: Wildlife Conservation International.

Hadley, M. (1994). Linking conservation, development and research in protected area management in Africa. *Unasylva 176, 45*, 28-34.

Kenya, Republic of (1975). *Sessional Paper No. 3 of 1975: Statement on future wildlife management policy in Kenya.* Nairobi: Government Printer.

Kenya, Republic of (1979). *Development Plan 1979-1983 Part 1.* Nairobi: Government Printer.

Kenya, Republic of (1985a). *The Wildlife (Conservation and Management) Act.* Chapter 376 Laws of Kenya. Nairobi: Government Printer.

Kenya, Republic of (1985b). *The Wildlife (Conservation and Management) Amendment Act 1989.* Kenya Gazette Supplement No. 95 (Acts No. 9). Nairobi: Government Printer.

Kenya, Republic of (1989). Development Plan 1989-1993. Nairobi: Government Printer.

Kenya, Republic of (1994a). *National Development Plan 1994 to 1996.* Nairobi: Government Printer.

Kenya, Republic of (1994b). *Economic survey 1994.* Nairobi: Central Bureau of Statistics.

Kenya, Republic of (1994c). *Sessional Paper No. 1 of 1994 on recovery and sustainable development to the year 2010.* Nairobi: Government Printer.

Kenya, Republic of (1995). *Economic Survey 1995.* Nairobi: Central Bureau of Statistics.

Kenya Wildlife Service (KWS) (1990). *A policy framework and development programme 1991-1996.* Nairobi: KWS.

Kenya Wildlife Service (1994). *Wildlife-human conflicts in Kenya: Report of the five-person review group.* Nairobi: KWS

Kiss, A. (Ed.) (1990). *Living with wildlife: Wildlife resource management with local participation in Africa.* World Bank Technical - Paper No. 130 Africa Technical Department Series. Washington DC: World Bank.

Mbugua, Ngugi wa (1994). Maasai-game conflict: Who has right of way? *Sunday Nation* (January).

Musyoki, B.M. (1992). Marine National Parks and Reserves of Kenya. In C.J. Mayers, & C.K. Rumisha (Eds.), *A proposal for the establishment of the Mafia Island Marine Park, Tanzania*

Part II: Proceedings of the planning workshop 20th-24th October 1991 (pp. 74-80). Dares Salaam: World Wide Fund for Nature.

Nyeki, D. (1992). *Wildlife conservation and tourism in Kenya*. Nairobi: Jacaranda Designs.

Olindo, P. (1991). The old man of nature tourism: Kenya. In T.J. Whelan (Ed.), *Nature tourism: Managing for the environment* (pp. 23-38). Washington DC: Island Press.

Pratt, D.J., & Gwynne, M.D. (Eds.) (1977). *Rangeland management and ecology in East Africa.* Huntington, New York: Robert E. Krieger.

Sinclair, M.T. (1992). Tour operators and policies in Kenya. *Annals of Tourism Research, 19*, 555-561.

Sindiga, I. (1984). Land and population problems in Kajiado and Narok, Kenya. *African Studies Review, 72*(1), 23-39.

Sindiga, I. (1992). The future of Maasai pastoralists. *Professional Geographer, 44*, 101-102.

Sindiga, I. (1994). Employment and training in tourism in Kenya. *Journal of Tourism Studies, 5*(2), 45-52.

Sindiga, I., & Burnett, G.W. (1988). Geography and development in Kenya. *Professional Geographer, 40*, 232-237.

Sindiyo, J. (1992). Management proposal for the Mara Dispersal Area. In C.G. Gakahu (Ed.), *Tourist attitudes and use impacts in Maasai Mara National Reserve* (pp. 76-78). Nairobi: Wildlife Conservation International.

Standard, The (1993). Ntimama lashes out at Leakey. *The Standard*, (December).

Talbot, L., & Olindo, P. (1990). Kenya: The Maasai Mara and Amboseli Reserves. In A. Kiss (Ed.), *Living with wildlife: Wildlife resource management with local participation in Africa.* World Bank Technical Paper No. 130 (67-74). Washington DC: World Bank.

Tuya, S. ole (1992). Keynote Speech. In C.G. Gakahu (Ed.), *Tourist attitudes and use impacts in Maasai Mara National Reserve* (pp. 3-5). Nairobi: Wildlife Conservation International.

Western, D. (1992). Planning and management for optimal visitor capacity. In C.G. Gakahu (Ed.), *Tourist attitudes and use impacts in Maasai Mara National Reserve* (pp. 66-75). Nairobi: Wildlife Conservation International.