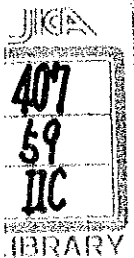


ケニアにおける野生生物保護

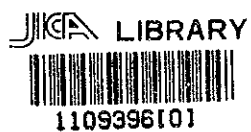
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国総研セミナー

テーマ：「ケニアにおける野生生物保護」

日時：平成5年3月1日 14:00～15:30

場所：国際協力総合研修所 2階 国際会議場

講師：Dr. Richard E. Leakey

ケニア野生生物公社総裁

(Director, Kenya Wildlife Service)

(講師略歴)

ケニア人人類学者。1994年、アウストラロペテクスの発見で有名なリーキー博士夫妻の長男として生まれる。弟は前環境・天然資源省大臣。1968年、ケニア国立博物館館長に就任。1990年、ケニア野生生物公社の設立と同時に、同公社の総裁に就任。ケニアは、野生生物保護においては最も保守的な立場を取る国の一つであるが、同国で同分野を担当する実質的な最高責任者である。1992年、京都で開かれたワシントン条約締結国会議においても、野生生物保護の重要性をアピールするために、精力的な活動を行った。著書多数。ベルギーにて『サー』の称号を授かる。ラムサール条約ケニア代表。WWF名誉会長でもある秋篠宮殿下とも親交がある。

国総研セミナー「ケニアにおける野生生物保護」

Dr. Richard E. Leakey ケニア野生生物公社総裁を講師に招いて、平成5年3月1日、国総研国際会議場で、国総研セミナーが開催された。要旨は以下のとおり。



ケニアでは、観光化等による象牙の市場価格高騰に伴い、60年代に65,000頭いた象が80年代半ばには16,000頭に減少するなど野生生物は危機的な状況下にある。こうしたなか、ケニア政府は89年、没収した大量の象牙の焼却処分を行った。

この象牙の焼却処分がもたらした最大の効果は国際取引市場を消滅させたことにある。これにより、300ドル/Kgだった象牙の価格が5ドル/Kgに下落。それまで投機目的で取引に関わっていた者にとって、象牙の魅力は激減した。80年代半ばには年間数千頭もの象が殺されていたが、今日ではその規模は30頭以下である。したがって、野生生物保護のために、その取引市場を制限することは非常に重要である。

今日、一部の国から象の個体数が増加したのだから象牙取引を再開すべきとの主張がなされているが、取引再開は象牙の価格を上昇させ、再び密猟の増加を招くだけだ。密猟阻止のためのコストは莫大である。現在の財政状況と社会開発のニーズを考えると、こうした負担を割く余裕はない。また、象牙取引を再開し、社会開発の財源を確保しようとの主張もあるが、そうした安易で危険を孕む方策による利益よりも、例えば、国立公園の入園料を現在より1ドル50セント値上げすることで得られる利益の方が大きいということを強く認識する必要がある。

(JICA NEWS 93-3-20 No.191より転載)

MODERATOR: Thank you for waiting. We'd like to begin our seminar now. Today, our topic is on "Wildlife Awareness in Kenya," and we have the pleasure of having Dr. Richard Leakey, who is the director of the Kenya Wildlife Service. Dr. Leakey is here in Japan in order to have some consultation with the Japanese government on grant aid and also to do some observation of Japanese national parks. Dr. Leakey has been very kind to give us this time, and we'd like to take this opportunity to thank him for taking the time from his very busy schedule to accept this seminar.

As for Dr. Leakey's biographical data, you have already been given some leaflets explaining his background, and so I shall omit it today.

I know that this theme is of great interest for all of you. We will have about a one-hour presentation by Dr. Leakey, and perhaps after that it will be followed by a QA session. So Dr. Richard Leakey, can you start with your presentation? Thank you.

DR. RICHARD LEAKEY: Let me say straight away I am extremely grateful for the opportunity to be here today. I think it is an important opportunity for me to be able to present Kenya's policies and views on a number of conservation issues. And I hope that in the Q&A session, there will be ample time to further clarify points that I may not adequately address in these off-the-cuff remarks.

Let me begin by taking a few moments to present some of the historical background to wildlife in our country. I believe this may be useful to you.

When the colonial penetration of East Africa got under way at the turn of the century, there was conservation in practice across the country. The numbers of people in Kenya were relatively small. The land was very extensive, and wild animals were to be found living the width and breadth of the country.

The British colony established a number of laws, and one of the first laws to have been established in Kenya was a law that basically disenfranchised Kenya people from the utilization of their wildlife. Laws were established giving rights to hunt wildlife to European immigrants, and the same laws made it virtually impossible for the Kenya people to exploit wildlife for their own benefit. This was a part and parcel of the colonial process in this part of the world.

Up until the end of the Second World War, the exploitation of wildlife

resources in our country was predominated by hunting and by the utilization of game purely for sport and for meat and for trophies. It wasn't until 1948 that the first national parks were established in Kenya and, when they were established by the colonial authority, they were established in areas of land that were to a very large extent land on which people had traditionally had interest and rights. But with the establishment of national parks the people were excluded from that land. Many of our national parks, therefore, are politically land that has been alienated from the indigenous population.

In 1948, the national parks were established basically as a means of ensuring that the hunting and utilization of wildlife did not overexploit the resource and that some of these wilderness areas would be preserved for posterity and for future generations. Although at that time, in 1948 and the early fifties, nobody believed that these national parks could possibly at one time be of value to the indigenous people who were not considered at that time to be relevant to this discussion.

At the time of independence, we had in Kenya, that is in 1963, we had in Kenya two organizations. One, a game department, which was a department of the government responsible for the management of wildlife utilization outside the national parks. This was to control hunters, to control those seeking trophies and to control wildlife which was damaging farmers' land and livestock and crops.

The second organization, the Kenya National Parks Board, was not a department of the government but was what we call in Kenya a state corporation. And that organization was responsible for the management of the protected areas, and at that time, 1963, it was receiving most of its revenue from the resources that it was able to generate from charging visitors who wanted to go to have recreation time in these parks. Of course, in 1963 the visitors were all expatriate or foreigners and there were no local people having access to these areas.

At the time of independence, the game department was serving a very useful role in controlling the damage of wildlife on people's farms. It was a small organization, but all government departments at independence were small because up until that time they had been serving only the interests of the

colonialists. It was only after independence that government departments began to take on the much broader responsibilities of the welfare of the people, the majority, who had won their independence through the processes that had gone before.

As the government of Kenya faced increasing responsibilities for education, for health, for agriculture extension, new roads, internal and external security, the amount of money available in the country for wildlife management decreased and did not keep pace with the increased tasks that the wildlife management authority had been given.

Many indigenous Kenyans began to acquire new land. In many areas of the country where there had been no ranching and no farming, there were now farms and ranches. And the people expected to be given the protection from the lions, the elephants, as their British counterparts had had before independence.

The resources of the government department were inadequate to provide a viable service. In contrast, the Kenya National Parks Board, which was semi-independent of the government financially, began to benefit from the increased numbers of tourists coming into the country as a result of our independence and the government, the new government commitment to expand tourism.

As tourism grew, the resources available to the national parks for the operation of the protected areas grew with it and reached a situation in the early 1970s where a lot more public money was seen to be spent looking after the animals. And the government department who was supposed to protect the people from the animals was operating very inefficiently with far fewer resources and leading to some very serious political questions as to what the government was doing in terms of its priorities. Was it placing animals before people?

As a consequence of that, it was decided that it would be appropriate to invest quite heavily on the strengthening of the wildlife sector. And the Kenya government made an approach to the World Bank in 1974 for a \$22 million loan under the IBRD program to restructure wildlife management and conservation in our country.

The money that was raised from IBRD was destined to be used for roads, for vehicles and for general infrastructural improvements. But the experts who came with the loan and who helped negotiate the loan believed that it was

appropriate for Kenya to revise and change the laws affecting wildlife and, in so doing, to abandon the two organizations and to amalgamate the national parks with the government department. And there was established a new, single department, known as the Wildlife Conservation and Management Department, which was to be run as a government department with the responsibility of looking after the national parks and continuing the function of protecting the farmland from the damages caused by wildlife on private land.

Although there was a substantial investment at that time in the capital infrastructure, little was done to enhance the revenue-earning capacity of the new department. And in Kenya, like in many other parts of the world, government departments are expected to remit any revenues to the central treasury and the central treasury will in its own wisdom release funds for that section of the government that needs the money most.

As in many cases, the priorities when taken from public health to public education to internal defense and agricultural extension, wildlife was usually lowest in the spectrum and wildlife continued to receive inadequate money.

But at this same time, in the late 1970s, the amount of tourism to our country was increasing dramatically. The tourist trade around the world was increasing dramatically. And there was an economic boom, if you like, in our country in the private sector in terms of being able to exploit wildlife.

Because the wildlife department had inadequate money, many of the services that it had been expected to perform were not being adequately performed and, I'm sad to say, that many of the people who were expected to perform those services were not performing those services and were looking for ways to supplement their own income, which was inadequate under the circumstances.

For example, in the late 1970s, a person responsible for the protection of wildlife in a national park, what we would call a ranger, might have been earning the equivalent of US\$500 a year as a salary. He was protecting rhinoceros and elephant who had tusks and horns that were worth more than several years of salary in the case of one individual animal. Rhinoceros horn was selling for almost a thousand dollars a kilo. Elephant ivory even then was selling for sums of money that made one elephant an absolute bargain in terms of supplementing your income.

Not only that, tourists were flooding through the gates of the parks paying in cash and the people taking the money were paid at such an appallingly low salary that the opportunity to supplement income by corrupt means was there for any to see.

It has been very easy for people to criticize corruption in this context, but I would put to you, my colleagues here in Japan, that if you are faced with an opportunity to educate your children or alternatively for your children to receive no education and no health, the question of corruption is more difficult to respond. If you have alternatives, it is one thing; if you have no alternatives, it is another. Particularly if those leading the organization are themselves not necessarily playing the game by the rules.

And so we got into a very serious situation. During this, in the late seventies and early eighties, as a result of the traveling public, the price of ivory and the price of rhino horn, for different reasons, began to rise.

In the case of ivory, we believe that to a certain extent tourists, particularly from Western countries, were going out of their homelands to what they called exotic destinations and they were looking for souvenirs that they could bring home to demonstrate their travels. Ivory represented a magnificent medium for souvenir trading. And the market for ivory grew very rapidly. It grew to the point where by the late seventies the legal supply of ivory from natural deaths and ivory that was made available by legal killing was inadequate, and illegal ivory began to enter the market.

The market continued to grow and, by the mid-1980s, the ivory arriving in the Far East, principally Hong Kong, Taiwan and some of the other countries in this area, was in the region of 75% unaccountable for in terms of export documents. Only 25% of the ivory reaching these destinations could be accounted for on the basis of legal export documents from Africa. It was a disastrous situation and one which caused us great concern.

By the mid-1980s, Kenya's rhinoceros population had been reduced over 15 years from an original 20,000 animals to a population of less than 300. And Kenya's elephant population had been reduced from approximately 65,000 in the late 1960s to a level of around 18,000 by 1986 and 1987.

The consequence of this decline was not only in the absolute numbers but

with the elephants in particular, the elephants that were being killed were the adult animals that were in the breeding ages, and the breeding elephants were being removed so that the whole demography of the population was threatened, and we got some very skewed populations of elephants in our country.

It was against that background that the decision was taken to make further changes to the wildlife management system in Kenya.

My own involvement happened in 1989, when I was invited or instructed, it's never clear what one, how one describes this, but I, anyway, became the director of Kenya's wildlife department on a presidential edict. My responsibilities were made clear. We had to stop the decline in the population of elephant and rhino, and I had to restructure the wildlife management in such a way that it would put right the problems and move toward providing a better basis for the tourist industry and economic future through tourism for our country.

It was at that time that we had to make several fundamental decisions about our policy. And I would like now to address those very briefly for you.

The first, and perhaps most important, issue was that we had to address the political context of wildlife conservation in our country. We had to move quickly from a point where the majority of our people saw wildlife as a peripheral interest of value only to foreigners and the central government, where they saw the national parks as alienated land, and move it to a point where there would be national pride and appreciation for conservation of wildlife in national parks. And where the conservation and economic returns from conservation would not only be seen to benefiting the country but could in practical terms be made to benefit the people whose land had been alienated either pre-independence or immediately post-independence. So there was a popularization of conservation task that we faced that I will come back to in a minute.

Secondly, we needed to address the inherent problems of mismanagement. We had to look to ways in which we could find adequate funds to run the management authority. We had to provide budgetary resources to enable us to be active in the field in protecting farmers from wildlife and protecting wildlife from poachers and other ills that existed.

This meant that we had to come up with a budget that was substantially

larger than the budget that the government had up until that time been able to provide, and it had to be a budget that in addition to meeting annual costs had to incorporate a substantial element of capital investment so that we could rebuild the infrastructure upon which so much depended.

Indeed, we decided that the way forward would be to move as rapidly as possible to a commercial approach where we would look to set the target of being independent of any government subsidies by 1994. Our objective was to go from 100% government support in 1989 to 0% government support by 1994. We, therefore, required new parliamentary approval, and we had to take a new legislation before the parliament as a matter of immediate urgency to get the change in status of the management authority from a government department to a publicly owned corporation.

Thirdly, we had to put in place a mechanism by which we could effectively increase our revenues, bearing in mind that as a developing country we have considerable problems of inflation. Recessions hit us as hard as anybody else. And we needed growth in our income, not simply a one-time increase. And we needed to be able to project a budget that would sustain our self-funding capacity, which meant there had to be growth in revenue and growth in revenue required that we had to increase our marketing capacity, increase the number of visitors going to our parks.

To increase the numbers of visitors going to our parks, we had to consider two issues. The viability of these parks if more and more people went to them and sustaining the quality of the product that the visitors are going to see. Many of our customers, or overseas visitors, are clearly becoming very discerning and are looking for experiences that are positive, not negative. They need roads that they can drive on comfortably. They need accommodations that are secure and well managed. They need security in the national parks, and they need to see the wildlife without having to share it with 100 other visitors who surround the animals and make it like a zoo experience.

In order to address that, we had to look to the needs of the infrastructure and we discovered that we had a challenge of raising very substantial sums of money in infrastructure. We had to basically repair close to 8,000 kilometers of road. We had to reinvest in our vehicle fleet. We had to provide heavy equipment

for maintaining roads. Many of the buildings in which our national parks administration were operating were built in 1950, in 1955, and were falling down. Many of our staff were living in conditions that were primitive to the extreme, where families were sharing one room that was three meters by three meters with no toilet facilities, no running water. It was an unacceptable situation. Therefore, there had to be this investment.

Well, we were successful in getting the parliamentary approval. And that is how the Kenya Wildlife Service was established. In terms of the infrastructural improvements, we put together a project that looked to raise approximately US\$150 million in its first phase of five years, with a second phase of a similar amount starting in the fourth or fifth year depending on our success at disbursement. We have been fortunate, and we have raised the first tranche of money and we now have a fund that we are dispersing worth \$148 million for the first five-year commitment.

The improvements in our infrastructure have begun. The improvements in our management are under way, and we have been able to get rid of many of the corrupt elements. We have been able to recruit a lot of new, young Kenyans on better salaries, and we have a very high work morale in the Kenya Wildlife Service today that was not there before.

But, of course, we have a good many other problems. One of these problems is that much of our management is being addressed without recourse to adequate research. We're basically handling matters on a crisis management basis as opposed to a forward-looking, carefully worked out management plan. We know very little about the viability of certain ecosystems in the long term. We are absolutely ill-prepared for the consequences of limited national parks. What happens to genetic diversity in island populations of certain species? What can be done to ameliorate the consequences of genetic isolation in some of these small areas?

There are areas that fall between our legislation and other legislation. We have the capacity to protect wetlands, but what happens to wetlands that don't fall within the protected areas? The upstream consequences of industry to downstream wetland reserves is well known to you in this country. It is a matter that has not been adequately addressed in any African country and one which

we are needing to focus on now.

But before we come to look at some of the specific issues, I'd like now to turn to the question of poaching because I believe this is a fundamental issue and one in which I believe there are errors where there might not be necessarily a perfect understanding between our two countries.

We had a problem in Kenya that I believe is not unique to Kenya. It is a problem that is almost certainly a problem of Africa. There may be exceptions. I would doubt that they are. I have traveled in the southern African region, and I have visited many of the countries who publicly disagree with our philosophy. And in those countries I have seen with my own eyes what I believe to be parallel situations with our own.

Nonetheless, let me initially address the position we had in Kenya. We have now the capacity to fight any would be aggressors against the elephant. We have an anti-poaching force that is well-armed, well-trained and, more importantly, well-informed. We have been able to set up an intelligence system in the country which basically gives us insight and advance warning of any would be attempt to take out any significant numbers of elephant on a poaching basis.

To establish such a force and to arm such a force and to maintain such a force at a high level of training is certainly not cheap. It has cost us a great deal of money. To maintain it is costing us a great deal of money. Nonetheless, it has at this stage appeared to be quite successful. We believe, however, that the success in Kenya at reducing the numbers of elephant that have been killed from several thousand a year in the mid-1980s up until 1988, to less than 30 last year, is a recognition not of the military strength of the Kenya Wildlife Service but is a reflection of the fact that there is a very limited market for ivory at this time.

In 1989, at a time that we burned 12 tons of ivory valued at US\$3 million we have been offered \$300 a kilo for that ivory. The documents were in my possession, and there was a buyer from Hong Kong who was ready to give us on average \$300 per kilo for the shipment that was in our bonded warehouse. After the fire of burning of the ivory, after the publicity that surrounded that event and after the campaigns that we mounted across the world, ivory in Kenya was selling on the black market for less than \$5 a kilo within one year.

The price of ivory today in Kenya on the black market is approximately \$14

or \$15 at the moment. It is virtually unsellable on any quantity, and the ivory market is picking up small pieces that have been buried for some years. People will buy one tusk or two tusks for some local purpose, carving, and they'll get it out, but there is no major market in ivory in Kenya. And the same applies in Tanzania, Uganda, and a number of different African countries.

It is of interest to note that in our attempts to infiltrate the trade and to understand what the trade is doing, whenever there has been publicity from further south, in Zimbabwe or South Africa, about the possibilities of reopening a limited trade with some countries in the East, speculators have started to ask where the ivory is to buy and the prices immediately started to go up. As soon as we discount it in the press, it drops down again. And there is definitely and certainly a relationship between speculative buying of ivory, the possibility of opening trade in southern Africa and the interest of ivory in East Africa, where at the moment poaching is at an all-time low.

We believe that we could probably in Kenya sustain a campaign against the poachers if the ivory trade were reopened. But the protection of elephants against that background would cost a very large part of our budget and would make it impossible for us to pursue our other programs in community wildlife, wildlife extension, wildlife education and the political agenda that we have of making wildlife attractive to the people of Kenya and making wildlife of benefit to the people of Kenya. We would have to devote most of our resources to a guerrilla war in protecting those animals. We believe that is an unacceptable price for us to pay.

We at the moment in the absence of a heavy poaching threat are already beginning to devote 25% of our revenue from the parks to a national fund for rural development. We are providing literally hundreds of thousands of dollars to support community-based projects, for schools, kindergarten, primary, secondary. We are providing funds for bursaries for children to go to national high school. We are providing funds for local people in the rural areas to get bursaries for university. We are providing clean water, cattle dips, veterinary services, medical services through this fund. We project that by the end of next year this fund will be worth four or five million dollars equivalent in Kenya shillings. It is a very substantial commitment to rural development and the

popularization of conservation. This project, like many others, would die if the trade in elephant ivory were to resume.

We accept, and we accept without any hesitation, that there are stockpiles of ivory in Africa that at the moment could be sold and could bring funds to those countries that have shortage of funds in their own wildlife authorities. Nonetheless, we believe in Kenya that the amounts of money that are being talked about are relatively modest.

For example, in some of the countries of southern Africa, if they increased the charges for which tourists from abroad paid to go into the parks by as little as US\$1.50, they in one year would recover more money than they would project to gain from the sale of ivory on a continuing annual cull basis.

We believe that part of the problem with the ivory trade is not the legal aspect. We do not dispute that you can fingerprint ivory and determine where ivory comes from using expensive isotopic techniques. What you cannot do is fingerprint illegal ivory that is turning up in third-party countries with forged documents as it used to prior to the 1989 ban of [CITES].

The capacity to move illegal products across African borders is infinite. We have in Africa the preferred trade authority with customs unions that allow shipments from Kenya to be bonded in sealed containers and shipped to southern Africa with no right of inspection by any customs authority on route to its final destination.

There is no way in Kenya, which by many accounts is one of the more developed of the African countries, there is no way we could control the customs authority from entering into illegal deals with ivory smugglers. And if we are unable to do it in Kenya, it is clear that many of our sister countries would have the same problem. It is clear that if poaching were to be reestablished in Kenya we could fight it. But we are light-years ahead in terms of our financial strength to be able to deal with it than many African countries who will be rendered absolutely hopeless under these circumstances.

It is for this reason that we in Kenya believe it's fundamentally important to maintain the ban on the ivory trade, not just in terms of Kenya but across the board. Part of our reason for this is that we recognize that one of the strengths of our campaign has been public reaction. Public reaction will not be sustained

if it is presented with two types of ivory, illegal and legal. The consumer is not an easy person to persuade anyway, and the consumer is very easily confused. And if a consumer is told that there's good ivory and bad ivory, the consumer will probably judge ivory is OK. And if that happens, the market will increase, the supply will not keep pace of it without the illegal entrant of that, and we will have problems.

The final point I would like to make on this, because I know that there are other issues to discuss and I want to save some time for that, is that we are aware that there are claims that there are excess numbers of elephant. Indeed, this is a problem that we face soon in Kenya.

With the cessation of poaching in our country, we are beginning to see now that certain populations will have to be restricted to certain areas because of the growth of agriculture in different parts of the land. We are beginning to explore the erection of wildlife barriers, electric fences, that will prevent elephants from entering farmland and destroying people's crops.

As a consequence, there is no predation on these elephants and there is restricted range. These elephants will invariably cause significant environmental damage and in so doing will not only jeopardize their own long-term survival but will provide a quick crisis for biodiversity management in our own country in these areas.

Elephants are extraordinarily destructive if they exceed the numbers that their range will carry. We are aware that there are populations in Africa that might already have reached the point where they are excessive to the carrying capacity of the protected area. We recognize Zimbabwe, Botswana, Namibia and others claim that they are in that position.

The killing of elephants, which is the elimination of herds thought to be too numerous is a management opportunity and a management approach that we are willing to accept. The domestic sale of the meat and the skin of those animals and the utilization of those products as a means of saving wastage we accept. What we find difficult to accept is that the cull should lead to an external or international trade in any one of those commodities, particularly ivory, which is so easy to smuggle in small pieces and which has such enormous potential for being contraband once again.

But before leaving this, let me simply say that we are not unaware that the proponents of reopening the ivory trade are the same people who in the meeting that was held in your country, in Kyoto, last year, the CITES meeting, led an attempt to reopen trade in rhinoceros horn. And it was the Zimbabwe delegation who proposed in Kyoto that because they had adequate numbers of black rhino in the country, the only way they could successfully manage them was to start selling the horns that they would remove when they dehorned the rhinos as part of their conservation strategy.

They presented, not once but several times, claims that they had in excess of 2,000 black rhino in Zimbabwe a year ago today. These claims were being repeated as recently as four months ago. They have now counted the rhino as part of the dehorning process. They have found less than 400. The real figures are probably less than 300 black rhino; 1,600 rhino were not even there when they were seeking these changes in international regulations.

We believe that before we accept that there is an excessive population there needs to be some independent assessment of the population numbers in the areas that are being cited for this particular approach to management. And we are far from persuaded in our country that the excessive numbers actually exist on the basis that excessive numbers of rhino appear to have been phantom and the same may well apply in this other case.

From our perspective, the elephant and rhino are simply distractions to a much more important cause of wildlife management and conservation. In the face of development, in the face of extension, in the face of meeting the challenges of the growing population with countless problems, our wildlife and our natural habitats face many perils and many threats.

A very good example is one in which Kenya and Japan have had constant dialogue. We have a town north of Nairobi where there is a great shortage of water. This is Lake [Macru], the home of the flamingo, one of the most spectacular spectacles of bird life in the world. Over a million flamingo live in this lake, and people from around the world visit the site, which is absolutely unique.

In an attempt to help Kenya meet its needs for water in this town for both domestic and industrial use donors have found the way to move water from one

river system into another, and the inflow of water to this town's reservoirs will be increased many fold. The consequences of increasing the water going in obviously increases the water going out, and the water going out goes into the lake. The lake, which is sustained by being very shallow and therefore having extensive algal growth, is a lake that now will soon become deeper. When it becomes deeper, the water chemistry will change, the algal bloom will change, and one of the great spectacles of our time will probably be destroyed simply through the concerns to help people have adequate water.

It is difficult for a country like Kenya to set limits on growth of a particular town, and yet as a species we human beings must look forward to the needs of the future that is beyond our own time and recognize that there are other constraints and concerns that we have to recognize.

We believe, in the Kenya Wildlife Service, that the management of wetlands, the protection of areas such as Lake [Macru] and the flamingos are just as important as the debate on the rhinoceros and the elephants. And yet the financial implications of such is that it is the high visibility species that are more likely to attract the attention we need if we are to succeed in our endeavor.

We have at the moment in the Kenya Wildlife Service very ambitious programs. We believe that the most important aspect of our work is still to provide the political support at grass-roots for the programs that we are launching.

We are a country of great poverty. We are a country where conservation is very difficult to get people to believe in, because they don't have even one meal a day, let alone three. The way to do this is through extension work, through sharing the benefits and getting people to participate, to provide some pride in the cultural and aesthetic values, and to get rid of the idea that conservation is somehow a developed country elitist concept and that it is somehow imposed on Africa by Western values or technological values.

Africans and Africa were conserving wildlife long before the Western countries made contact here. People in Africa were living in harmony with their resources and utilizing those resources on a sustainable basis long before Britain or France or Germany colonized that continent. It was the Western nations who destroyed the balance in the first place. And it is surely not for them to say now

that the approach to conservation is theirs. It is as much Africa as it is Western.

We believe that the political and community side of this program is extremely important. We also believe that land use is something that a country like Kenya must evaluate. Much of our land is dry and has been termed semi-arid. The opportunities for land owners to maintain growth in their expected income from the utilization of land in the traditional manner is shown to be not very hopeful.

The grazing of cattle and sheep and goats in semi-desert land produces poor quality meat and doesn't match the growth requirements of families that have access to medicine and veterinary services.

Unless alternative and use can be found, we can paint a scenario of increasing poverty in the semi-arid lands of country, and we personally believe, I personally believe, it is the policy of Kenya that wildlife does offer an alternative avenue of land use in much of our country.

For it to be an alternative land use, there has to be a satisfactory management authority, a management authority that can address problems efficiently and effectively, can provide the extension and education, and that can ensure that the resource is managed on a sustainable basis into the long term.

We believe it is implicit in our mission that we cannot expect the taxpayer to fund our operation. The only way this can be done is on a commercial basis. When we talk of encouraging tourism and making parks increasingly available to our visitors, it is not because we value the visitors over our people, it is because unless we develop this industry we will not have the resources to develop the needs of our own people.

It is a different situation from that which pertains in the United States or Japan. You are not maintaining your wildlife for an economic lifeline for your country. You are maintaining your wildlife and your wetlands for your own domestic cultural, scientific and other purposes. We are, too, but we have to place the emphasis on the strategic, economic points today because we are in a competitive country where there are alternative claims for public resources and public land. It is for that reason that we are emphasizing the commercial underpinning of our operation and not any other.

Clearly, there is a danger. One of the dangers is that we will put the

commercial interests ahead of all other considerations. And one of the concerns that we have is to come forth with a plan of action that will safeguard our principal mission, which is the protection and management of biodiversity for the enjoyment and benefit of future generations of Kenyans.

We would expect to have never more than 30% of the wildlife protected areas available to mass tourism. Most of our protected areas will be retained as wilderness areas or areas of restricted ecotourism, where high-priced visitors will inflict minimal damage on areas that have been sustained and retained for the benefit of future generations.

But in order to achieve that, we undoubtedly must commercialize certain areas and maximize the gains from these to pay our own way. It will be many, many, many years before the Kenya taxpayer is producing enough money to support health, education, national security, agricultural extension and wildlife management, et cetera. We have no choice.

We believe that the model which is being pursued in Kenya is a model that is probably applicable to other African countries. We believe the procedures that we are following may well be possible to follow in other parts of the world, although we recognize that some of the things that work for us may not work for our neighbors.

But the one thing that has worked and has worked for our neighbors too is the strategy on maintaining a low price of ivory through the ban on ivory and the public awareness of the consequences of reopening that trade.

I think probably at this juncture it might be appropriate to turn now the meeting over to some questions. I think there's a lot to discuss, and I'm sure in a room this size there is more than enough to keep us busy until the end of the program. So thank you very much for this opportunity.

QUESTION-AND-ANSWER SESSION

MODERATOR: Thank you very much doctor. Now, we would like to open this to the floor. If you would like to ask a question, please raise your hand and please wait until the microphone is brought over to you. Now please state your name and your affiliation as well before you ask a question. Thank you.

[OITA]: My name is [Oita]. I am from the United Nations University. I would like to thank Dr. Leakey for his very clear presentation which gave also a reply to what many people here certainly were looking for, that what you want do with the lifting the ban of the ivory trade and your advice was basically that it shouldn't be lifted even if the populations in some countries may raise to a sustainable level.

Well, your efforts in Kenya are quite well known and they have been receiving wide acknowledgment in the world. Would you, first of all, would you think that Kenya has been of the African countries maybe the most successful in wildlife conservation strategies? And why is this? Is it because of the high level of political support?

And secondly, where emphasizing the fact of the need to make wildlife conservation an economically viable option for the population and changing the attitudes of the people, do you think that you have achieved fairly broad level of support from the population at this stage?

LEAKEY: Let me reply first of all by saying that Kenya's success, which is spoken of today in the field of wildlife, is very new. It was less than four years ago, in fact it was less, in fact even three years ago, when Kenya was held up as an example of the worst wildlife management authority in Africa. It is a transformation of less than four years, and I'm sure four years ago you would have found countless records in international meetings where Kenya's reputation and record in management of wildlife was held forth as an example of a disaster.

The fact that we have been able to turn this around is in part related to a commitment by the government to get behind the policies that were thought through. But I think it may be more importantly a recognition both within and without that we developed our own strategy to deal with this issue and we know what we want to do, and we are doing it ourselves, that there is clearly more than

simply high-level political support behind the story. We have been very clear.

And I think in that regard other countries could follow if they were to take a firm position on this issue. I personally believe, and I know that there are many who will find this more difficult to accept, but the story in developing countries is the same throughout Africa. There is not enough money in government to give projects that are not of the first priority in terms of the national budget, and by necessity, in the face of the HIV crisis, the education crisis, and famine and starvation, wildlife management and conservation will always take a secondary or third position, and as such, they will continue to fail. And I believe the private enterprise approach is a necessary lesson that we have learned, and should be looked at very critically by other countries. And I believe it will be.

That if you like is the main response. And your second question, I didn't write down. Could you just remind me of that? It was...

Onto that one, I mean, it is again, I think, premature, because although the project is four years, three years old, it has taken a little time to get off to a start. We've had a number of difficulties as a country. We've been through our first multiparty election, and the buildup to that had some political difficulties that led to negative publicity and our tourist trade didn't grow at the rate that we projected.

But my assessment of the response from those areas where the revenue sharing is going is that it's extremely well received. I mean, incredibly well received. And the point I would make is that whilst I recognize that in southern Africa, particularly in Zimbabwe they have a program called Campfire, where they allow people to benefit from the hunted animals. The amount of money being released by Campfire and the amount of money being released by revenue sharing are totally different. We are talking about several million dollars by the end of next year. With Campfire, it is not ever likely to reach that level even if they reintroduce massive hunting in those areas. There simply isn't the capacity in the Campfire program to see that sort of growth.

And therefore, the sharing of revenue from the national parks, in addition to wildlife utilization programs which we are implementing, I think has a much better hope of providing the goodwill that is necessary for the survival of management and wildlife in our country.

MODERATOR: Any other questions or comments?

INOUE: My name is Inoue from a [Spix] consultant. Now in Kenya at present, you seem to be placing a lot of emphasis on the development of arid, dry land. Now if the development of arid land is promoted with the current population the people will be going increasingly more to arid land and which will make it more difficult for the coexistence of mankind and animals, wildlife. What do you think of this possibility?

Now the second one is, apart from the national parks, what about the conservation of national reserve land? [Masai] and other tribes are there. Is the conservation or management of these reserve lands also going smoothly?

LEAKEY: ...by saying that I do recognize that there is a potential conflict over the emphasis of semi-arid development and the consequences that poses for some of the wildlife coexistence. It is my personal belief that the best option for development, that is economic gain from semi-arid land may involve the wildlife option. It has, however, to be developed on such a basis that the people themselves benefit from the wildlife, not merely some absentee landlord who takes rights over that land at the expense of the people.

We are already seeing signs of some of the nomadic peoples looking to form cooperative movements that could benefit from wildlife utilization on their land, both from the touristic viewing side as well as from the hunting side in terms of meat and skin.

This is such a new concept for us in Kenya and with the difficulties we've had in really structuring policy with the impending election last year, there hasn't been a national discussion on this. But it is my belief that wildlife will offer a viable, attractive alternative for semi-arid land development.

Certainly, the traditional use of this land with nomadic pastoralism is not an option for the future. But the net result of going on the traditional way is to reduce the incomes to the landowner or the person on the land in real terms given the economic reality of the country to date.

The options of irrigation in semi-arid land is not very positive in our country. We have relatively limited hydrographic resources. The opportunities for rapid saline buildup in irrigated lands in some of these squalls is high, and I think the options there, unfortunately, are also limited.

In terms of the reserves, we are moving very cautiously in that one simply because the fundamental approach is slightly different in that the reserves are the primary resource for local government income in certain areas such as the [Masai Mara] and such as some of the others.

What we are proposing is that the Kenya Wildlife Service would provide professional management of these reserves really on a contract to the local authority. We would not change the ownership of the land to a national resource. We would not change the economic arrangement that the benefits of these reserves went to the local government and the local people. But we would provide the professional management which would enhance the revenues that they are earning beyond the point that they are.

One of the present difficulties is when a national reserve is managed directly by the local authority, the local authority is inclined to take a lot more money out of the system than it is prepared to put back. And we have seen the degradation of the reserves because the local authorities are short of money, and they are not prepared to apportion the budget to ensure sustainability of the wildlife resource.

We, therefore, believe that a third-party management contract would offer a more attractive alternative where they could maintain a budgetary growth that they would search but the management could adjust then its revenue track to provide both for the local authority and for the money necessary to put back into the management of that reserve.

Some of the reserves are working very well under this arrangement. Other ones are still a little problematic in that there is a certain amount of distrust as to what the central government wildlife agency will do if it gets management.

MODERATOR: Any other questions?

QUESTION: ...Worldwide Fund for Nature Japan. And I am quite concerned the case of the Lake [Macru] because in part because there is going to be a [friendship] convention in Japan, and the main theme is going to be the wise use for that land. And you mentioned that there was a sewage treatment plant, which is a directive of action taken to that management. But I wondered if there is going to be any chance for proactive modernization such as introducing tourist industries so that you can generate some money to be able to use that lake, or

do you think there is any other option besides the tourist industry to harness this Lake [Macru].

LEAKEY: Let me say that the Lake [Macru] is already a national park. It is a major revenue earner in which the local people peripheral to the park will be the beneficiaries of revenue sharing. But the needs of a quarter of a million people to have more water so that they can flush their toilets and get water to wash and to drink is obviously very difficult to evaluate in economic terms. And in terms of political terms, it is going to always be more important that people have water than people have flamingos and revenue for schools and clinics.

It is one of the more difficult environmental conflicts that we have and one which offers very few avenues of solution, except if we could reach some understanding that there would have to be a commitment on all parts to see a ceiling set as to the size in which the town could grow and the type of industries that the town would allow. But municipal authorities around the world are known for their reluctance to engage in those sort of discussions. And it is a problem that we in Kenya will surely have to address.

I do now know what the outcome will be. But I do think, and I guess this is where I think it's very important to emphasize a point that I have made elsewhere, and that is, it is often easier for the donor community to take appropriate environmental steps than it is for the recipient because you are putting unacceptable decisions to the recipient, and if the donor community is aware of these consequences and addresses them from the outset on the same stringent rules which you apply in your own countries it might make it easier sometimes to deal with these questions.

I think the Lake [Macru] problem has not been to beset us for at least a decade or more, but I think down the road, unless the Kenya government is prepared to address this, we will lose that lake as an ornithological paradise. It is not the sort of issue that can easily be addressed with public debates, international public debates, such as the ivory, because it's addressing much more fundamental issues of sovereign needs of a people to have drinking water and water for sanitary purposes.

And yet, the answer is ultimately, I suppose, to find the resources, to find an alternative outlet for the city's water and to pump the water uphill to another

area where it can be recycled and used possibly in agricultural irrigation. But that's expensive.

MODERATOR: Any other questions?

QUESTION: I belong to JICA. Kenya, of course, has been very successful into tourism, therefore as you have emphasized on the commercial basis. I believe that Kenya is really one of the most advanced countries in terms of commercial-based control or management of wildlife.

But what I am concerned about now is that Kenya has many tribes from south Sahara area, [Masai] is one of the tribes. I think it is also in Tanzania. Those tribes have many cows and bulls. The short grass, they are short grass eaters, right? The cows do not eat tall grasses, therefore the cattle eating short grasses, well, I think there will be a conflict between the two kinds of species. I think there will be a conflict of [sering] eating.

But the question, the issue of the management of wildlife and also the issue of the traditional life of tribes, how do they relate to each other? And there are hunting tribes, right? The hunting tribes are the ones who sustain their living by hunting animals, so in what way, from what standpoint could we protect such tribes, legally speaking? I would like to know if there are any, could you maybe touch on the legal aspect of protecting those hunting tribes?

LEAKEY: Well I think first I would like to say that I appreciate your compliment about our success in the management of wildlife from the commercial standpoint. And yes, there will be a conflict of interest between cattle people and wildlife. However, as I have indicated, I think in the long-term there is really a clear case for wildlife being a more successful land-use alternative than cattle if the traditional people are to maintain growth in their economy.

The cost today in Kenya of educating children and of access to medicine and higher education, clothing, public transport, is such that with all Kenyans wishing to participate in modern life the traditional land uses of bush cattle is not providing the resources for families that are growing. And there have to be alternative land uses, and I believe wildlife does offer this to a certain extent. But this is something we're looking at.

In terms of the question of traditional hunting, it is for whatever reason true to say that most Kenyans have not engaged for many, many, many years in the

eating of wild game. There are many traditions and many people, the [Bakot], the [Masai], for example, do not eat game meat. It is contrary to their tradition, their belief and they wouldn't touch it.

We have a few people in Kenya who are traditionally hunting communities, and they are still living as hunting communities. And although the law says they should not hunt, we close one eye and let it continue.

Where we have problems is when other people move into the areas and say they are part of the same community and they want to hunt, not using traditional means but using AK-47 semiautomatic rifles. And here we have to say, this is not traditional. This is commercial.

I think in the long term, just as in other countries, Kenyans will be moving to the 21st century quite rapidly, and there are very few people in Kenya left who can justify at remaining in a lifestyle that was typical 40-50 years ago. The government has a policy of trying to get 100% of our population to go to school. We want our people to have immunization, to have equal opportunities to the job market and to settle so that they can be provided with security.

Therefore, these traditional lifestyles will become part of our traditional history, not part of our contemporary culture. And I think the commitment that has been made today is to gradually offer incentive for people to change their way.

Now clearly, there will be in some cases a conflict of interest. But I think with the discussion and with compassion the next decade when these are likely to still be the issues, it can be moved through without there being serious loss of human rights on from this question.

But I think our objective is to move beyond this point so that there is no necessity for people to live as they did in the 1800s but to live as they can in the year 2000. And we are looking where Kenyans are able to stand up with Japanese, Americans and Canadians and not have to resort to techniques and attitudes that were perfectly legitimate initially.

But we're not a museum. We are not keeping people as they were as a tourist attraction. We are not keeping people in a museum because we think it's better for them. They must decide. And people generally decide for progress, and if they want to progress in one direction they must progress in all directions because

that is how government has to be run.

MODERATOR: Yes, the lady there.

QUESTION: ...you are not kind to the animals, they will go away to other countries. And I think the number of the cars in national park in Kenya are quite large, and at some stage it's necessary to control the private cars. At the moment, any car can go in if you pay your entrance fee. But if at some stage if it's necessary to control only the...authorize the tour company cars or sight-seeing cars may be allowed to get in.

LEAKEY: I agree with you entirely that there has been a significant abuse of the national parks by every vehicle wanting to go there, go in there, a lot of problems with off-road driving and of overcrowding of certain core areas in the national parks. And I think the [Ambuseli] and the [Masai Mara] and [Samburu] are three classic examples of what not to do.

We will over the next two years extend our program of management to ensure that each national park will not exceed the carrying capacity in terms of visitors. We believe that it is possible by using the economic approach to discourage people from going to some places and to encourage people going to other places. And we believe that by increasing the price in some places and discounting the price in others we can spread the viewing public more evenly.

I think you are aware that in Kenya 95% of our visitors are going to only seven of the national parks and reserves, and we have 52 in the country. We must spread this more evenly, and we must seek to ensure, as I said in my address, that the product that the visitors see is of high quality. This means that the wilderness experience and the opportunity to view wildlife in reasonable privacy must be there.

And I believe we will set, as they have in some areas, limits on the number of people and vehicles that can go in the park, and as a first step, we have stopped in the national parks off-road driving. And in [Ambuseli] now, nobody drives off the road. This has had a big impact on the regeneration of the plains.

The next step will be to allow for growth in the numbers of visitors by increasing the number of visitors in each vehicle and so reducing the number of vehicles that are going into the park at one time. By providing discounts as they do on the highways, that people would travel seven in a vehicle instead of three

in a vehicle. And I think you can get a lot of advantage from an imaginative approach of reducing vehicle density by increasing the utilization of each vehicle in terms of number of people.

It is a new era for us. We have to explore how large we can allow the vehicles in terms of small buses and the consequences that has on animal shyness, the consequences of that on the road surface, but I believe there's a long way we can go in that respect.

We also believe that we are very traditional in our view about walking. And we would like to see many areas in Kenya national parks made available to tourists to go on foot, to have a wilderness experience by hiking in areas where it's reasonably safe and where we would provide adequate security through armed guards against buffalo and other dangerous animals.

I think we are really at the beginning of a new era in terms of wildlife management as far as Kenya is experienced. And the only thing I would like you to be assured of is that we fully recognize that the observation and criticism that you have made we share it and we are committed to addressing it very thoroughly in the next year or two. But we have so many problems to deal with when we inherited this disaster that it takes a little time to get things in place. But now that we have this \$148 million fund for investment in infrastructure, many of these questions will in fact now be dealt with. And I am very optimistic about the outcome.

[OITA]: I'm sorry to take up the floor for a second time, but you have emphasized the ultimate objective of the wildlife management as being the preservation of biological diversity for the future generations. However, now here as well as in societies, meetings and in most other context the discussion tends to focus on fairly large animals that can raise certain emotions in people.

Yet the biological diversity consists of very many other parts also, and obviously, I mean, people talk about the rain forest and the arid and semi-arid lands which form a large part of Kenya, for example, there will be much fewer species but still they have to be protected. And national parks obviously play an important role in this protection, but not only the national parks. There are also other areas, and you have the very densely populated small holder areas also.

Now you mentioned earlier, rather in passing, the need for research and the

lack of knowledge about biological diversity and its protection in Kenya. Could you elaborate on that a little bit? Is there some research, significant amount of research going on in this field? Is the Kenya Wildlife Service involved in it? And well, whose responsibility is it? And where would you see the most urgent gaps in research?

And before you ...that's why I ask, I have the microphone. Maybe I could make a little advertisement. Actually, on Thursday, this Thursday, there is an international workshop on the theme, "Planning for Sustainable Use of African Mountain Resources," starting in Kenya. It is organized by the United Nations University and the African Mountain Association, which is an academic meeting and it's trying to look into some of these areas of research. There's also including in this meeting, there's a workshop on ecological management and conservation research strategies for Mt. Kenya. And I might mention also that Dr. [Niki] is on the scientific organization, organizing committee, of this. Thank you.

LEAKEY: Well, let me say that on the research we have in Kenya a problem at the moment in that the concept of biodiversity, biological diversity, the Global Environmental Fund, I have ringing bells that there's money to be had. And many, many people in Kenya, agencies and institutions want to get involved in biodiversity because they see ways to strengthen the institution. So it's very difficult to know exactly who has what responsibility.

However, having said that, the Kenya Wildlife Service, by law, is responsible for the protected area management and the endemic wild-living species of mammal, bird, insect and amphibian, the reptile, but not fish. Consequently, whether we are the prime agency or secondary agency we have a responsibility for 52 parks and reserves, which comprises 10% of Kenya's land surface, which is 28,000 square miles of territory. It's a very large part of the world surface that we are responsible for, and we are de facto responsible for a significant part of Kenya's biodiversity future.

Having said that, Kenya has had a very successful program since really the turn of the century in building up an inventory of species, and there has been in Kenya a very active program at the Natural History Museum, which I was director of for 23 years. And we have accumulated an inventory of plant and animal life from most habitats in the country. It is a vast collection, and one of

the collections that extends in its reference value far beyond our own borders because it is a collection of sub-Saharan tropical African fauna and flora.

For that inventory to be of use, it has to become accessible through basically a data bank, a computerized data bank, and this is a process that the museum is now beginning to embark on. We have introduced in both the natural museum, where I've been chairman for many years since I took over the wildlife, and the Kenya Wildlife Service, quite a strong commitment to the GIS. And we are using computer and satellite imagery to begin to get some monitoring capacity of habitat change in different ecosystems. We are working closely with the [Unik] center, man and biosphere, in this regard.

It is going to take time to update the inventories and the monitoring capacity, because we need to monitor regularly each habitat against the GIS and get some ground truthing of changes that we're seeing. Get some values on sediment loads, get some values on algal blooms, get some values on a number of issues.

When I took over the wildlife service, the wildlife authority, three and a half years ago, we had nobody on our staff with a Ph.D. We had maybe one person with a master's. We now have, I think, 11 Ph.D.s, and we've got, I think, 11 doing Ph.D.s, and we're moving very rapidly to bring in a strong scientific component to our management.

The difficulty that we have is to develop a culture in the organization where scientific research is actually used in planning. There are many, many examples in the world, and particularly in the Third World, where you have researchers and managers here, and the research reports go on the shelf and the managers never read them. And we somehow have to get to the point where we have a culture in the organization where the manager seeks the researchers' advice on management policy. And this is a much more difficult problem that I don't have an easy answer to.

But there's no point in doing research for its own sake. If we're going to do this, we have to do it for management's sake. Therefore, we have to move into this very cautiously and in a way that is possible.

And our problem is that many of our managers are practical men and women who do not have an academic background because of the nature of

development in our country, and therefore it is doubly difficult to get a nonacademic to listen to an academic on this issue. And we have to go step by step, slowly, into this area.

MODERATOR: Now we would like to accept, entertain, one more question. This will be the last question. Are there any questions?

[OITA]: Could I ask one more question about the influence of this Kenya Wildlife Services of the development within the protected areas, and do you have much say in deciding if the project should go ahead or not and especially if it's financed by overseas aid agencies.

LEAKEY: The answer is that if there's to be any development of any kind in any national park, we and we alone have the authority of deciding if it will or will not happen. In the national reserves and the areas outside the protected area system, we are consulted. In some cases, the consultation leads to changed plans; in other cases, it leads to a breakdown of friendships. But generally speaking, we are very successful.

And I think the fear is that everything that the developer wants to do, a conservationist will reject. And that needn't be the case. And in terms of the national parks, what we are actually doing is taking the initiative and we are setting up management plans for each national park that will incorporate desirable developments in terms of different types of hotel accommodation, company accommodation and things of that kind.

And we are actually going out and looking for the investors who will come to us because we've invited them rather than responding to them because they've got some other influence that they are coming to us. And I think if we take the ground from them by leading, we are more likely to avoid some of the conflicts that we have seen elsewhere.

But at the moment the understanding is, and the law is very clear, the Kenya Wildlife Service is the only authority that determines the development that will take place inside a national park, which is very satisfactory. It also carries the burden of responsibility because sometimes I am sure we will get it wrong.

MODERATOR: Thank you very much. As I said earlier, Dr. Leakey is extremely busy. He has another assignment that he has to go right now, so please give big hands to Dr. Leakey. Thank you very much.

JICA