



# Attitudes towards Wildlife Conservation in Kenya

- Comparison of Rural and Urban Perspectives

*Åsikter om viltbevarande i Kenya  
-jämförelse av landsbygds- & stadsperspektiv*

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**Etologi och djurskyddsprogrammet**



*Photos taken in Kenya, 2012, by Cassandra Ekdahl*

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## **Attitudes towards Wildlife Conservation in Kenya - Comparison of Rural and Urban Perspectives**

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I denna serie publiceras olika typer av studentarbeten, bl.a. examensarbeten, vanligtvis omfattande 7,5-30 hp. Studentarbeten ingår som en obligatorisk del i olika program och syftar till att under handledning ge den studerande träning i att självständigt och på ett vetenskapligt sätt lösa en uppgift. Arbetenas innehåll, resultat och slutsatser bör således bedömas mot denna bakgrund.

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## **ABSTRACT**

Human-wildlife conflicts are widespread in many parts of Kenya and are posing great difficulties in the work of wildlife conservation. Up until recently, most wildlife conservation efforts were solely concentrated to protected areas with adjacent rural communities having little or no involvement. However, when working with conservation projects, it is vital to not only work with directly affected factors, such as the animals and the environment, but also with the nearby communities and the local people. Consequently, studies like this one, concerning the feelings and opinions of the local people towards the environment and wildlife will be of great help in order to secure a future for both parties. In this context, it is also important to acknowledge that wildlife conservation to a large extent is dependent upon public acceptance and, with a large part of the countries inhabitants living in cities, it is important to get the opinions of people living in urban areas as well.

Attitudes and opinions towards wildlife are affected by a multitude of factors. The factor studied in this paper, that can have profound effects on perceptions and attitudes towards wildlife conservation, is place of residence. This study's primary focus was placed upon the attitudes of Kenyan citizens on the subject of wildlife conservation, with an emphasis on rural residents and as contrasted with urban residents. The study also aimed to study the success of a community-based conservation (CBC) project in regards to the opinions and attitudes of the rural residents living within the conservation area.

It was found that the majority of the respondents (both rural and urban) showed positive attitudes towards wildlife conservation in general. However, marked differences in values between the two samples were found. The urbanites displayed a wide array of different values towards the environment and wildlife, while all rural participants shared the same utilitarian view. In addition, the results showed that the rural participants were of a much more positive attitude than anticipated if compared to previous published research and in this specific case, these findings can be correlated with the CBC project applied in that region. Further the results found in this study indicate that rural communities show more favourable attitudes towards wildlife conservation if they perceive they are receiving enough benefits from the conservation project to outweigh the costs of such work. This suggests that CBC can be used effectively both in regards of having a successful conservation and as a means of generating further development of rural communities as well as creating favourable attitudes towards conservation.

## 1. INTRODUCTION

Kenya, as well as the African continent at large, harbours a variety of large wildlife populations (Campbell *et al.*, 2003). However, these wildlife populations are rapidly declining (Campbell *et al.*, 2003; Kock, 2005), a problem that can be seen around the world. Ecosystems are becoming fragmented and destroyed at an alarming rate (Kock, 2005) and many species are struggling for their survival at many places around the world (Hunter & Gibbs, 2007).

One reason for the decline in wildlife populations is the increase in human-wildlife conflicts (HWC) (Akama, 1998; Distefano, 2005). Areas that are less attractive to settlement by humans and where climate is harsh and agriculture unfavorable hold the most stable wildlife populations in all of Kenya. Subsequently, these areas have few human inhabitants and the livelihoods of the people are often based on pastoral livestock (Kock, 2005). However HWC is most commonly found in areas where humans and wildlife live side by side (Distefano, 2005). HWC is a growing problem around the globe but it is especially intensified in developing countries, such as Kenya, where the rural communities suffer the largest costs and often live far more closely with the surrounding wildlife than in the developed part of the world (Distefano, 2005).

### 1.1 Human-wildlife conflict in Kenya

Arising conflicts with wildlife can be seen as a relatively new and increasing problem as pastoralists in Africa, for over 2 000 years, were able to peacefully coexist with the surrounding wildlife (McCabe *et al.*, 1992). Before the point of the African colonization this coexistence was considered to be relatively sustainable (Murphree, 2000), however with the colonization came a new means of conservation, known as fortress conservation (Nsanjama, 1993). Today, wildlife in Kenya is largely protected and preserved by this conservation approach (Homewood, 2004), which means that the Kenyan government controls areas where wildlife is preserved (reserves, sanctuaries and national parks) (Akama, 1998). However, a majority of wildlife in Kenya lives outside of these protected areas, like national parks and game reserves, which has been shown to preserve only a portion of all wildlife populations (Western *et al.*, 2009). Hence, unprotected areas play a significant role in the future of wildlife conservation. In addition to this, the approach of fortress conservation focuses directly on protecting areas from human use without any regard to the human communities surrounding the protected area (Infield, 1988.) Furthermore, this conservation approach brought with a prohibition of use of natural resources by the local communities (Homewood, 2004), a factor that may very well have worsened HWC in Kenya.

According to Akama (1998), the strategy of fortress conservation has failed not only to protect wildlife but it has also created a cliff between the rural communities and wildlife by taking away the rights and benefits from the locals and placing it in the hands of the government as well as conservation organizations. Nyhus *et al.* (2000) concluded that locals are less willing to collaborate with adjacent conservation work if they do not perceive a positive experience from it. Others have concluded that it is difficult to have a successful conservation project without involving the local people (Infield, 1988). Many more are also realizing that for a conservation project to become truly successful a good relationship with the local residents is necessary (Newmark *et al.*, 1993; Sekhar, 2003).

In an attempt to integrate local communities in conservation work and to foster positive attitudes, a new conservation approach was created in the 1980's, called Community-

Based Conservation (CBC) (Adams & Humle, 2001) that focuses on areas outside of protected areas. CBC was developed with the purpose of changing the negative relationship that has been created between people and the environment to positive, by involving local communities in the management of conservation work. In reality, this means that CBC aims at creating job opportunities as well as handing back natural resources to the local people (Adams & Humle, 2001).

CBC has today become incorporated into wildlife policies in Kenya and specific attention has been placed on wildlife conservation in land owned by pastoralists, such as the Maasai (Lamprey & Reid, 2004). CBC is applied at various sites in the country however the practices of fortress conservation are also at work. Nevertheless, the effectiveness of CBC have been debated by some researchers, suggesting its' inefficiency as a conservation approach (Kramer *et al.*, 1997; Brockinger, 2004). Brockinger (2004) completely rejects the idea of local support in order of a successful conservation, implying that too much focus is put upon politically weak rural communities. Other skeptics of CBC have said that this strategy loses focus from the main goal of conservation by dividing conservation efforts with community development (Kramer *et al.*, 1997; Struhsaker, 1998). This present paper will study the success of a CBC project at work in one rural location in Kenya.

## **1.2 Attitudes towards wildlife conservation**

The conservation of wild animals is to a large extent dependent on public acceptance (Kleiven *et al.*, 2004). The relationship between people and wildlife is affected by a multitude of factors (Lagendijk & Gusset, 2008) and previous studies point out several factors that effect people's opinions towards wildlife conservation. Economical factors are a major deciding factor (Infield, 1988) as well as level of education (Romañach *et al.*, 2007; Tomicevic *et al.*, 2009) and use of land resources (Infield, 1988; Newmark *et al.*, 1993; Lindsey *et al.*, 2005; Arjunan *et al.*, 2006). For example, those whom use their land for tourism have the most positive attitude towards conservation (Lindsey *et al.*, 2005) while cultivators and pastoralists fall on the other side of the scale, being concerned about their livestock's survival and/or their crops getting destroyed by wild animals (Gadd, 2005). Another factor that can have a substantial impact on attitudes and opinions towards wildlife conservation is place of residence (Hunter & Gibbs, 2006). All of these mentioned factors influence people's attitudes and as a result may affect the outcome of conservation projects (Lagendijk & Gusset, 2008).

Thus, studies concerning the feelings and opinions of people towards the environment and wildlife will be of great help in order to secure a healthy and sustainable future for all parties. It is of importance to involve the local communities in the work of conserving wildlife and in order to successfully obtain this, it is necessary to know and understand their opinions and feelings towards the surrounding environment (Infield, 1988). Research regarding rural residents outlook of conservation has been fairly well documented (Infield, 1988; Nepal & Weber, 1995; Mehta & Heinen, 2001; Hunter & Brehm, 2004; Gadd, 2005; Karlsson & Sjöström, 2007). However, studies addressing urban residents perceptions of wild animals and their conservation in less developed regions of the world are relatively scarce. As previously mentioned, wildlife conservation is largely dependent upon public acceptance (Kleiven *et al.*, 2004) and with a large part of the country's inhabitants living in cities, studies concerning urbanites feelings is of high importance. Living an urban lifestyle can differ greatly from a rural one and many urban residents are living somewhat isolated from nature. This separation from the natural world can lead to a limited understanding of it and can also lead to apathetical feelings towards nature (Hunter & Gibbs, 2006). These types of feelings can in turn have negative impacts on the success of conservation projects.

Access to published research about rural and urban perspectives on wildlife conservation in the developing world is fairly limited. Although, studies conducted in Sweden indicate that urban people, living further away from predators and other wild animals, often show a more positive view of wildlife than people living adjacent to wolf territories (Ericsson & Heberlein, 2003; Karlsson & Sjöström, 2007). Research in Norway also agrees with these findings, where it was found that the density of the human population in the participant's place of residence was of importance to wolf conservation. People living within high human density areas, such as cities, showed a higher acceptance towards a larger wolf population than those from areas with a low human density (Bjerke *et al.*, 1998). Other studies also suggest that residents in cities show a more favourable attitude towards conservation than rural residents (Van Liere & Dunlap, 1981; Berenguer *et al.*, 2005) while others have found no differences in attitude or behavior between rural and urban residents (Arcury & Christianson, 1993). According to Hunter & Brehm (2004) studies around the world indicate that that people's attitudes towards nature are complex and cannot be easily categorized and divided into separate groups. This present study will, in addition to study the success of a CBC project, also investigate attitudes of rural residents in Kenya as regards to wildlife conservation and as contrasted with urban residents.

## **2. AIM OF THE STUDY**

The purpose of this study is to examine attitudes and perceptions on wildlife conservation in Kenya. This study compares the relationship towards conservation in two sample groups, one rural and one urban. An additional objective is to examine a community-based conservation project in two group ranches, Shompole and Olkiramation, in Kenya. In particular, the following questions is researched:

- How does place of residence affect attitudes towards conservation in Kenya?
- How is wildlife conservation perceived within the two sample groups?
- Can the conservation project applied at Shompole and Olkiramation group ranches be assessed as successful based on the attitudes of the residents, and if so how?

### **3. MATERIAL AND METHODS**

#### **3.1 Study areas:**

People living in two different residential areas, one rural and one urban, was selected for the data collection. The rural residential area is located in the Kajiado District in the South Rift Valley, Kenya. A majority of the residents in this area belong to the Maasai tribe. The Maasai are pastoralists but an increase towards cultivation been seen over the past decades (Lambin & Mertens, 2001). The Maasai have coexisted with the surrounding wildlife for many years (Hazzah et al., 2009) and within this region several CBC projects have been established. Two conservancies were visited in this area, the Shompole Group Ranch and the Olkiramation Group Ranch. Both conservancies harbour a rich and valuable wildlife and the region constitutes an important wildlife refuge in the dry season (Lambin & Martens, 2001; Morris *et al.*, 2008).

For the second half of the data collection, the urban coastal area of Mombasa with adjacent townships was chosen. Mombasa is the second largest city in Kenya and the regional centre alone has more than 700 000 inhabitants (Awour *et al.*, 2008). The Kenyan government classified Mombasa in 2004 as one of the regions in Kenya with the highest frequency of poverty, with estimations of over 50% living below the poverty line (Akama & Kieti, 2007).

#### **3.2 Data collection**

The data in this study were collected in the two areas described above in February and March 2012. The preparatory work and the fieldwork were conducted in collaboration with another student, Maria Barlow. Interview questions were drafted before departure from Sweden and later on rephrased with the help from research assistants from the Lale'enok South Rift Resource Centre (SRRC) on site in Kenya. The SRRC functioned as a base of operations for the first half of the data collection in this study.

The reformulation resulted in 10 questions concerning wildlife and wildlife conservation matters, five within each subject (Appendix 1). These subjects were later on divided into two independent studies. This study will show the results from the wildlife conservation questions. Two sample groups for the interviews were chosen with each sample consisted of 10 participants and was as diverse as possible concerning age, though all of the participants were over 20 years of age and each group had a relatively even sex distribution (Tab. 1).

The first study group consisted of people from the Olkiramation and Shompole Maasai communities. Research assistants working at the SRRC chose the interviewed people according to our criteria. These criteria were to have a group of an even sex distribution, different age groups represented, people from different clans within the Maasai community, people owning livestock and/or farmland, and not directly working with or in any other way directly benefitting from conservation work. To avoid misunderstandings, the interview questions were formulated in simple English and then translated into Maa, the local language, by the research assistants. To assure correct understanding by the translators we were thorough in discussing each question's meaning and purpose. The questions were asked in Maa and then recounted to us in English during each interview.

The second study group consisted of people living and working in the urban environment of Mombasa. The interviewed people were randomly selected with a couple of criteria in mind. Firstly, it was important that they did not in any way benefit personally from tourism



and/or conservation work. Secondly, we preferred respondents not owning any livestock and/or farmland. We selected the interviewees by walking into various shops, banks, opticians etc. asking if we could interview one or more of the employees. These interviews were conducted in English. We did not use the help of translators for this part of the data collection as all interviewees had very good English skills.

Table 1. Summary of respondents' basic data, showing respondent's age interval, gender, origin and profession for both of the urban and rural sample groups used in this study.

	Age (years)			Gender		Origin*				Profession	
	20-40	41-60	61-80	Male	Female	City		Village		Pastoralist	Other**
						Animals	No anim.	Animals	No anim.		
<b>Urban</b>											
Percentage	80	20	0	70	30	20	30	40	10	0	100
Quantity	8	2	0	7	3	2	3	4	1	0	10
<b>Rural</b>											
Percentage	60	10	30	50	50	0	0	100	0	100	0
Quantity	6	1	3	5	5	0	0	10	0	10	0
<b>Total</b>											
Percentage	70	15	15	60	40	10	15	70	5	50	50
Quantity	14	3	3	12	8	2	3	14	1	10	10

\* Origin is divided into two groups depending on whether the respondent was brought up in a city or a village. These two groups are in turn divided into two subgroups depending on whether the respondent was raised with or without farm animals.

\*\* Opticians, bankers, mechanics, drivers, entrepreneurs, accountant.

All respondents in both groups were informed about our background and the purpose of the study before the interviews started. None of the respondents received any incentives for their participation. All the interviews were recorded with a tape recorder and also written down during the interviews to assure nothing being missed and to make sure that we got all the information right. The interviews were conducted in a private manner where the interviewees could not listen or be influenced by each other's answers.

### 3.3 Observational data collection

While travelling around and interviewing residents in the South Rift Valley observations and notes about wildlife and conservation actions were made. Several conversations were participated in with conservation employees and other researchers, as well as people working with tourism and Maasai from other parts of Kenya. Likewise, while visiting Mombasa, different parts and townships were visited while in search of people to interview. These experiences presented the possibility to gain a more in-depth understanding of the conservation and development of the study areas and get a deeper insight into the local values. Other researchers have stressed the importance of complementing data collected through interviews with observations in field (Sørensen & Olsson, 2007).

### 3.4 Choice of method

The interviews were conducted in a semi-structured way and both closed and open-ended questions were used. The use of open-ended questions gave the participants' the possibility to think independently and freely express their feelings and opinions from which we could get a deeper analysis of the participants' attitudes and opinions. This also gave us the opportunity to guide the interview onto relevant topics (Huntington, 2000), as well as giving the possibility to ask counter-questions when it was apparent that the respondent was confused or not fully understanding the question. The use of semi-structured

interviews has previously been successful in collecting information about rural communities (Mishra *et al.*, 2003; Sekhar, 2003). The strength of semi-structured interview method lies in the fact that that it provides an opportunity for information that otherwise could be missed to be brought to surface and be discussed, while still providing enough structure that other useful information is not missed (Huntington, 2000). Each interview was unique and varied in timeframe from others but the average interview lasted about 20 minutes.

Before the execution of the actual study, a smaller pilot study was conducted. With the help of translators' two Maasai men working at the SRRC were test-interviewed. After this test, some of the questions were re-evaluated and rephrased.

### **3.5 Compiling of data**

As a way to ensure important thoughts was remembered, notes were taken during and following each interview session. Once all interviews were completed the research data was transcribed by listening to the recordings from all interviews, along with notes. Following this, the interpretation of data begun by summarizing information within each question and looking for important and outstanding themes and relating this to the objectives of the study. This was then analyzed for common patterns and other relevant information.

## 4. RESULTS

The collected results from the interviews are presented below, with each topic handled independently with urban and rural response apart.

### 4.1 Perceived knowledge about conservation

Question asked: *Do you think you have knowledge about the purposes of conserving and protecting the wide range of wild animal species in Kenya?*

#### *Rural response:*

All respondents stated to have sufficient knowledge about the purposes of conservation. The perceived purpose of conservation work varied among the respondents; some answers were more frequent than others. Nine of the respondents expressed the main purpose of conservation to be receiving benefits for the community. The answers for how they would receive benefits varied, although most said that this was based upon receiving funds from either one or two sources i.e. tourism and employment.

They also perceive that they have fewer problems with wildlife due to conservation, as well as having a higher security by making it easier for them to live in harmony with the surrounding wildlife. Three of the respondents also voiced a need for education, expressing the importance of educating people and taking action against illegal activities such as poaching. Two continued on expressing the importance of letting the wild animals live freely and give them peace without disturbing and frightening them. Wild animals were consequently seen as a great benefit with much respect.

While all respondents claimed to have basic knowledge about the purposes of conservation, nine of them also expressed a limited knowledge about conservation in other areas of Kenya, saying they only have knowledge about their own area. All respondents agreed that wild animals are of great benefit to them in their area. However, also as regarding conservation, they could not speak of other places.

#### *Urban response:*

Nine of the respondents stated to possess only a limited understanding of the purposes of conservation. In total only one claimed to be knowledgeable. The answers for perceived purposes of conservation were very diverse among the respondents. Four of the respondents mentioned receiving income from conservation as an important purpose. One respondent expressed concern for the survival of animal species, continuing on that the extinction of animals will lead to less money and income for the country.

Three of the respondents proclaimed that conservation practises were of importance from the viewpoint that wild animals should be sufficiently separated from human settlements by fences etc. These interviewees stated that wild animals are very dangerous and because of their dangerous nature they should be prevented to stay near people.

The other urban respondents, however, expressed that they saw a mutual bond between man and animal, that they need us just as much as we need them. Humans have the capacity to care for animals so when they are going extinct we must preserve them. Three interviewees took this a step further and proclaimed that animals have a value in themselves and their existence enriches our human lives. Three of the respondents also expressed religious views. God created wild animals for a reason and that they must have a

purpose on earth and for this reason we should take care of them. One respondent expressed this reason to be because they keep the ecosystem in balance.

#### **4.2 Attitudes towards conservation**

Question asked: *What is your opinion about the conservation of wild animals? Do you feel it's necessary? If so, why?*

##### *Rural response:*

Nine out of ten respondents stated that conservation was necessary. The reasons behind this varied slightly among the group. One person expressed the opinion that lions, baboons and leopards should be taken away completely because the removal of these species would benefit the community.

Nine interviewed people in this group voiced the same couple of reasons for the importance of conservation, all based on the same common ground: receiving benefits for the community. The voiced benefits were all things that created development within the community. The most frequent answers were; employment, receiving money to pay school fees so their children can go to school and having protection in severe drought when their livestock die. At these times they are very dependent upon revenue from conservation. One also mentioned conservation bringing forth development in the community by getting better roads and water to the village.

Half of the respondents voiced that conservation brings about harmony. Some respondents expressed having the viewpoint of seeing wild animals as their “second livestock”. They receive money from their real livestock as well as from the wild animals they help preserve. By giving protection to wild animals they insure their income from them and thereby see them as an equal source of income.

Four interviewees also expressed concern regarding the security of the conservancy and the protection of the animals in it. The same interviewees stated that the security should be improved in order to prevent killings of wild animals. Half of the respondents also expressed that conservation is necessary in order to continue receiving knowledge and skills for the protection of wild animals. They also expressed that the animals were there before them and they have a right to exist and we should not get rid of them. A majority expressed the importance of protecting wild animals so that they can flourish and procreate. Or as one respondent put it “*increasing numbers of wild animals means increasing revenues*”.

##### *Urban response:*

All respondents voiced that the overall work of conservation is of importance; six said it is very necessary. Four of the respondents voiced a deeper view of why animals need to be protected and why conservation is of importance. Their perception was that wild animals have a right in themselves to exist on this planet and that they are a part of us. They expressed that we should treat them the same way we treat each other. Two of these respondents also expressed the belief that wild animals should live in the forest (in the wild) and not in zoos. One respondent said: “*we invade their space, when really they should be left alone*”.

Nine respondents said that the most important reason for why conservation is necessary is because it brings an income to the country from tourism. Another important reason for three respondents, were to conserve for future generations.

### **4.3 Change of opinion towards conservation**

Question asked: *Has your opinion changed since you were a child? How and why?*

#### *Rural response:*

All respondents answered that their opinion has changed since they were little. All also said that they as children only possessed little knowledge of wildlife and knew nothing about conservation. Four gave examples of how they used to hunt and eat wild animals.

One male interviewee said “*..when I was young I knew nothing about wild animals. I used to hunt and eat and kill them*”. All respondents expressed that wild animals held no value to them during their upbringing and only domesticated animals were of importance because they gave them milk and meat. However, they said that they now have grown and learned and experienced a lot which has changed their beliefs. Today wildlife is seen as being equally as important because they are aware of the benefits they bring.

#### *Urban response:*

Half of the interviewees stated that their opinion has not changed since they were little. They have always felt that we should take care of wild animals and that we should respect them. Three respondents said that people in cities grow up with the idea that wildlife is cool and one female respondent said “*In town we are brought up thinking that wild animals are cool and we have more knowledge about wild animals than rural people...we need to educate the rural people*”.

The other half of the participants said that conservation is something new and awareness about it new. Going on saying that their opinion has drastically changed since they were little. One thinks that the right and importance of wild animals should be taught in school.

### **4.4 Outlook on conservation – cost or investment?**

Question asked: *Do you consider the cost of conservation as an investment or a cost? For yourself? For the country?*

#### *Rural response:*

All respondents answered that conservation is looked upon as an investment and that the benefits are higher for themselves as well as for the country. Wild animals are an investment for the country as they saw wildlife as the main earning in Kenya. Four of the respondents expressed a kind of pride for the work they were participating in. One elder female said “*other places in Africa that doesn't have conservation projects come here to see how we do it so they can start projects*“. Four respondents regarded this as a good thing because this will in turn lead to more acceptance of wildlife. For all of the interviewees conservation was personally seen as an investment. One male said “*all places in Kenya that have conservation have tourists... which brings money, which is good for the country*”. Four said that it brings benefits for every part of Kenya because tourists choose to go there because of the animals.

#### *Urban response:*

All respondents but one agreed that conservation is seen as an investment. The other respondent said that it depended on the purpose and it depends on priorities. If people are dying of hunger it is wrong to put money into preserving wild animals but it is a cost for those living close to the wild animals. Some respondents thought more long term. One said “*conserving the environment and keeping the climate in better shape. In the long run we will reap the fruits*”.

#### 4.5 The viewpoint of “problematic” wildlife

Question asked: *Do you consider any wild animals as a problem in general? For Kenya as a country? For the farmers?*

##### *Rural response:*

Half of the rural respondents answered that animals could be seen as a problem in general, naming the lion (*Panthera leo*) as the animal causing most problems, some others also named the African buffalo (*Syncerus caffer*). However, four of the respondents also expressed seeing the lion as a good thing as well and that it is a question of weighing the good against the bad. The other half of the interviewees responded that they did not consider any wild animals as a problem in general terms.

Regarding the viewpoint of problematic animals for Kenya three answered that hyenas (*Hyaenidae*) are causing problems. One respondent expressed an uncertainty however, believed that lion might be a problem. Although a clear majority, with eight of the respondents, expressed a very limited knowledge about other parts of the country, and thereby making them unable to answer the question, saying they only have knowledge about their own area.

Regarding problems for farmers eight interviewees answered hyenas and baboons (*Papio cynocephalus cynocephalus*) as problematic animals. Again many voiced the difficulty of the question, meaning that they bring forth good things as well as bad things. For example, some eat or in other ways destroy their crops and/or kill their livestock, but at the same time they also bring great benefits for the community. Or as one respondent put it “... *they are not good or bad*”.

##### *Urban response:*

Eight respondents replied that they did not see any problems with wild animals in general. However four respondents expressed the thought that rural people might be of a different opinion, arguing that they (urban residents) go and pay to see wild animals while rural people have to live side by side with them. Only one respondent expressed that some animals were bad “*lions, elephants (Loxodonta africana) and leopards (Panthera pardus) are very problematic animals... so dangerous.. not good*”. The two most frequently named problematic animals by the respondents were the lion and the elephant.

Regarding if wild animals could be seen as a problem for farmers six said that wild animals destroy farms. Five of these respondents also agreed upon the idea that the animals are not to blame. Two of these respondents arguing it was their land from the beginning before the farmers took it from them. The blame was often directed at the government and at the farmers themselves. One respondent said “*I don’t believe wildlife is a problem.. the problem is the farmers...it is their responsibility.. have to make sure to keep wild animals out by fencing..* “. Four voiced the opinion that it is up to the government to put in more effort and up to the farmers to put up proper fencing to keep the animals away and secure their crops.

## 5. DISCUSSION

### 5.1 Attitudes towards conservation

No distinction could be made between the two sample groups in terms of the respondents' perception of conservation importance. Most participants in both groups were found to be positive towards conservation and seemed to appreciate the importance of such work. The only two respondents found in this study to be of negative attitudes were of urban residency. Interestingly, participants from the urban sample group predicted rural residents to have negative attitudes and viewed them as less knowledgeable of wildlife than themselves. These findings are comparable with a study conducted in Sri Lanka on elephant conservation by Bandara & Tisdell (2003) where urban participants viewed local farmers as antagonists of wildlife conservation and ignorant when it came to conservation issues. However, both this study and Bandara & Tisdell (2003) suggest that these statements and preconceived ideas are inaccurate.

One can speculate as to how these preconceived ideas may have been fostered. I think that living an urban lifestyle can bring about a view and a feeling of superiority over people living in rural communities. I believe that, no matter where you live, it is easy to make assumptions about others, false or not. I also believe it is of importance to consider these feelings as they signify an "us versus them" belief that I myself view as negative when trying to further the development in our world. An additional factor that may play a part in this is the urbanites "isolation" from nature. I think that this isolation makes it much easier for them to advocate for biodiversity as it costs them very little to do so compared with rural residents. Another possible explanation for the urban respondents' preconceived ideas is that they, in part, could have been influenced by media, for example from news of negative actions by locals on populations of wild animals, like poaching or other killings for retributions. This could then have brought about a negative view of rural communities. In any case, this study indicates that the urbanites' beliefs were groundless and actually even suggests the opposite.

As mentioned, no clear distinction could be made regarding positive or negative attitudes towards conservation in the rural versus urban context. However, in both sample groups, the overall results were more favourable towards conservation than what was expected, taking previous studies in other countries into consideration. When compared with research in Sweden regarding wolf conservation (Ericsson & Heberlein, 2003; Karlsson & Sjöström, 2007) it seems that both sample groups in this study showed more positive attitudes towards conservation of carnivores than rural and urban Swedish residents. As for the urban sample group, this might not be a very surprising discovery as plenty of research points to the fact that most urban residents display positive attitudes towards wildlife (Van Liere & Dunlap, 1981; Ericsson & Heberlein, 2003; Berenguer *et al.*, 2005; Karlsson & Sjöström, 2007). However, the rural sample group's clear positive attitudes towards wildlife conservation can be seen as slightly surprising given the enormous negative economic impact the presence of wild animals pose on people's livelihoods. This impact is so much more significant in developing countries, like Kenya, where locals have a lot more to lose than in industrialised societies. This finding is also in contrast to other published studies. In Nepal, a survey of attitudes of rural communities living adjacent to the Royal Chitwan National Park, showed that the closer a community was located in regards to the park the more negativistic attitudes towards conservation could be seen (Nepal & Weber, 1995). In the high Andes of Argentina, a survey on local residents showed the majority of respondents taking a negative stand in carnivore conservation (Lucherini & Merino, 2008).

A similar study of farmers in Namibia also agreed with these findings (Marker *et al.*, 2003).

It would seem that perhaps the most important reason for the positive attitudes found in the rural sample group is the Maasai point of view that animals are a normal and important part of nature. This means that despite the possible, and I would also say probable, destruction of farms/crops and/or livestock losses, the respondents still liked to see these wild animals and considered them a part of nature. I believe these opinions might, in part, be based on the unintentional or intentional education brought by the conservancy. Another possible explanation is that these opinions might be a result from the financial benefits brought by the conservancy, although it should be noted that the visited communities do not receive any compensation from wildlife damage. Other research conducted near the Kruger National Park in South Africa strengthens this proposal, where similar positive views of conservation and wildlife were seen. However, those participants did not have any education about conservation but still showed favourable attitudes (Lagendijk & Gusset, 2008). Though, other research from the KwaZulu-Natal Province in South Africa is in contrast with these findings. The participants in that study showed hostile attitudes towards carnivores despite benefiting and receiving money from ecotourism (Gusset *et al.*, 2008). This suggests that money alone is not enough of an incentive and the combined findings from these three studies suggest that there might be something deeper underlying that determines one's values and in turn one's opinions and attitudes.

## **5. 2 Values behind attitudes**

While no evident distinction could be seen regarding attitudes towards conservation in the two sample groups, a clear difference in values could be seen. For the rural respondents, wild animals seemed to serve them a great purpose and wild animals were consequently seen as a great benefit and were regarded with much respect. The group as a whole showed a strong utilitarian attitude towards wildlife and the conservation of wild animals. The big emphasis for them was the practical value of how wildlife could benefit their community. When put in comparison with the urban sample, the values varied greatly between the two groups. Even within the urban sample group, the interviewees showed very different values and outlooks on conservation. Among the respondents several different attitudes were represented, most being aesthetic, utilitarian or humanistic, few also being egocentric, negativistic and moralistic. For the respondents with an aesthetic value system, the emphasis was put upon appreciation of the physical beauty and appeal of nature, while those with a humanistic view focused more on a strong emotional attachment and strong appreciation for different aspects of nature. The one person found in this study with an egocentric value system showed values that are strictly based on what nature can do for them and what benefits one might get out from exploitation of it. The sole respondent with a negativistic view showed fear and aversion towards nature as well as an alienation from it, while the respondents with a moralistic value system put their emphasis for nature's importance on the spiritual relevance of nature as well as an ethical concern for it.

Interestingly the only two urban residents of clear negative perceptions of wildlife were correlated with the only two subjects used in this study that were raised in absence of farm animals. This finding is interesting as it suggests that previous experiences are vital in fostering positive opinions towards animals. Results from this study also suggest that people, whom were raised with parents that appreciated wild animals, are also likely to receive a similar appreciation.



The differences found between the rural and urban sample groups are also of interest to discuss. I think that the differences found in-between the two groups has in part to do with closeness to nature. By that I mean that it is likely that the respondents from a rural residency have attitudes that are pragmatic and based on real interactions with wildlife, while the respondents of urban residency are more likely to have more conceptual attitudes that have developed removed from direct experiences. Given the distinction of differences between the sample groups as well as within the urban sample group, it would seem that many different factors impact ones values, such as upbringing, early experiences and education being a few big determinants.

Another topic of equal importance is the Maasai understanding of conservation work and why it is employed. I find it interesting that the results for the rural respondents suggest that money and perceived benefits play a significant part for the importance of wildlife conservation, yet at the same time, the results also indicate that animals should be preserved for their own rights. These two beliefs seem to stand in contrast with each other and display opposing views. I do not have a good answer as to how or where this view comes from, however, I believe it is of importance to discuss. In my opinion, most of the Maasai interviewed did not understand the full extent of conservation strategies and why they are employed. For the respondents used in this study the sole meaning of conservation work was development and financial benefits for the community.

Another discussion that can be raised in regards to this is that, me myself personally, would have liked to see them actually appreciating wild animals for their own value and not from how we can use them. I think that it is highly important that we try to change values that are “human centred” to a more ecological view that embraces all species. According to Kawall (2003) the biodiversity on our planet is at further risk if we are not able to change values to more biocentric values. As it was indicated in this study, values are likely to change through time and by promoting positive attitudes towards nature a successful conservation is more likely. If people can become informed about the importance’s of all species and the earths biodiversity we can foster attitudes that moves away from the “human centred” view that was seen in this study, to a more biocentric view that includes all life forms.

One can interpret the contrasting views of conservation importance, as a step forward in getting a realisation that wild animals have an intrinsic value in themselves and can be seen as a good step towards fostering values that are based on a more biocentric view rather than a strict utilitarian one. Nevertheless, this is potentially discussing beside the point, as the importance should lie in the fact that they realize the value of wildlife and help and promote biodiversity and as of now, the reasons behind this, is of less importance. If wild animals are conserved and protected, the first important step should be at focusing resources at urgent matters and a later on mission could be placed on trying to change the reasons for why this has developed.

### **5. 3 Conservation – costs vs. benefits**

One of the problems concerning the relation between wildlife and locals in developing countries such as Kenya is that wildlife often is perceived as a threat against the livelihood of the people as wildlife often is associated with destruction of fields and/or crops, as well as killings of livestock (Distefano, 2005). With this, the ability of wild animals to destroy the peoples’ livelihood is a major problem within conservation work. HWC are bound to occur in areas where humans and wildlife coexist. The vast question of how to resolve the conflicts arising between rural communities and wildlife populations is an important and

difficult one. To sustain a healthy future from the people and wild animals living in the same area it is essential to find solutions to these problems. This would benefit the purpose of conservation of endangered species as well as the development poorer countries. The focus of work needs to be put on both conserving wild animal species as well as protecting the rights of the rural people whom share their environment. Many studies indicate that conflicts between the two need to be resolved in order to have a successful conservation (Infield, 1988; Newmark *et al.*, 1993; Nyhus *et al.*, 2000; Sekhar, 2003). According to Gadd (2005) local communities are less likely to view wildlife positively and engage in conservation work if they do not receive any of the benefits from the conservation.

The problem in Kenya seems to be that much of the revenues from wildlife tourism do not reach the local people but end up at the national level (Akama, 1998). However to have success within a conservation project it needs involvement from local communities in a way that incorporates the local knowledge as well as the locals needs and community development (Wishitem & Okello, 2003). Nevertheless, not all researchers agree upon this idea. Brockington (2004) discard the ideology that rural communities need to be involved, stating that rural communities are poor and weak i.e. their resistance towards conservation projects are likely to be ineffective. Perhaps some truth lies in this argument; however, I believe that the big underlying point is being missed. Assuming the success of such conservation projects, there is still the undermining of local communities to consider and the fact that their right of existence and use of natural resources would be completely disregarded.

In my own opinion, it is not strange that rural people living adjacent to conservation sites show negative attitudes towards them when they themselves may be struggling for survival and conservation practices are making matters worse by prohibiting their use of natural resources etc. I believe that strategies should be employed where costs and benefits are more rightfully distributed. The argument for CBC in this case has been focused on returning revenues to the communities that bear the direct costs from wildlife damage (Campbell *et al.*, 2003), however there are also other strategies that focuses on alleviating HWC.

#### **5. 4 Strategies for minimizing HWC**

HWC needs to be minimized to a controllable degree in order to secure a future for species at risk of becoming extinct and I believe that special focus should be placed on conservation of unprotected areas, like the visited Maasai group ranches in this study, as they are essential for the conservation of Kenya's wildlife. According to Western *et al.* (2009) as much as 65 % of migratory and other highly mobile wildlife populations are found outside protected areas in Kenya. Hence, the involvement of members from such group ranches should be of high importance in conservation work as this not only further the development within the community, but also encourage positive attitudes towards conservation. By achieving a larger acceptance for wildlife conservation the chances of success of projects are likely to increase.

Then comes the question of how this is best achieved, one strategy, which has not previously been mentioned in this study however, should be acknowledged, is based upon reimbursements. HWC often carry substantial economical costs for rural communities and in the beginning of the 1970's the government in Kenya started to apply policies to reduce costs caused by wildlife (Distefano, 2005). In summary it focuses on alleviating costs from wildlife destruction and help the rural communities living adjacent to wildlife habitats is by reimbursing them (Distefano, 2005). By this act, the government hoped to increase the

tolerance of the rural communities to adjacent wildlife (Campbell *et al.*, 2004). However, compensation schemes in Kenya have been found to be troublesome. According to the Kenyan Wildlife Service (1996), the government has not reimbursed any crop destruction or livestock loss since 1989.

There has been a lot of concern raised from conversationalists about compensation schemes and their effectiveness. Sekhar (1998) expressed concern that an improved and well-developed compensation scheme could result in false claims about loss and destruction and leading to an increased problem. Also, it cannot be seen as a sustainable solution as it depends on the budget of the government (Distefano, 2005). In addition, it poses the problem of not encouraging rural communities to coexist with wildlife and encourage them to protect their livestock and fields. A researcher at the Lale'enok SRRC in Kenya put it like this "*if you receive compensation for loss of livestock you become inattentive*" (Lily Maynard, personal communication, 2012-02). Considering all this, I believe that the system of compensation schemes might not be a good answer. However, there is an evident need for a better solution. I propose this solution to be CBC.

### **5. 5 Conservation in Shompole and Olkiramation – successful or not?**

According to the combined responses from the rural respondents in this study they did not experience any problems with wildlife in their area. In fact, the pastoralist Maasai people in this study seemed to recognize the great potential for community conservation projects. Now this is a highly interesting point when it comes to the success of conservation projects. It was evident that the Maasai respondents felt that they were given so much in return for letting the wild animals be, that they did not see any point in hurting them. From the results of the interviews the conclusion can be drawn that wildlife has become of equal importance to them as their own livestock. For Maasai their livestock seem to hold great value and they are highly dependent upon them, being their source of income and livelihood. If in fact, the Maasai view wildlife in that area as their second livestock then that should be seen as a great accomplishment for the conservancies.

All participants in the rural sample group voiced the reliance on conservation work for further development of the community. These results are interesting as, after making some calculations with Samantha Russell from the SRRC and Jens Jung on site in Kenya (personal communication, February, 2012), the benefits per person in the community was next to nothing. However, more importantly, every single participant in the study claimed that their received benefits were the single most important reason for why they should help protect wildlife in their area. The most important aspects of this was having water in the village and having their children being able to go to school.

By the results found here it seems that the perceived benefits far outweigh the actual benefits. While looking at this strictly as a conservation strategy, putting the ethical question aside for a moment, it has to be acknowledged as a successful one. I base this on the grounds that, according to this study, it has promoted coexistence and minimized HWC in that area, as well as gotten a large local support for the conservation work. It is clear that it has also brought about a positive change in the villagers attitudes towards wildlife as well as raised their awareness about the value of protecting nature and wildlife. With these results, I consider the conservation work in the two conservancies visited to be working successfully. Now, returning to the ethical standpoint, there is the question of possible deceit of the members of the conservancies for the case of a successful conservation. But then again, if the member are happy and feel that they are experiencing plenty of benefits

from conservation work, why complain? If they make the connection between conservation and receiving money and other benefits, I believe it should be seen as a good thing.

This study shows that conservation projects can be positive and functional, and it is evident that the conservancies in the studied rural area significantly changed the attitudes of the locals and the communities are now integrating wildlife and beginning to integrate tourism initiatives into their livelihood strategies. I believe they still have more potential to increase income and benefits much more and I see the conservation there as having great potential. Presently, a form of community-based ecotourism is at its upbringing at the studied Maasai group ranches in Kenya. According to Goldman (2002) this can offer an extra income to their livelihood by giving benefits from wildlife to the locals. I believe that this is possible in the studied group ranches if they further develop and increase the ecotourism that is at its upbringing. If they are able to really get the tourism started they can truly begin to see real profits from this.

### **5.6 Further studies**

As this small study indicates that CBC might be a good means of conservation, it would be interesting to compare attitudes from locals from an area without CBC with a CBC area. By investigating and comparing attitudes for different areas it will be easier to apply conservation strategies that work successfully. Many rural participants in this study stated that the received money from the conservancy was of great importance and previous studies indicate that benefits like money can improve the attitude (Infield, 1988; Sekhar, 2003; Gadd, 2005; Arjunan *et al.*, 2006;) but to what degree? This study does indicate that CBC is a good alternative, however, to fully conclude this, further research on this topic is recommended.

### **5.7 Biases**

There are several possible sources of error in this study. During the first part of the study the assistance of translators was used to help with the translation. Firstly, this possibly introduces bias through the use of translators. It is possible that they, with our without purpose, chose to bring out their own values and ideas during the interviews. According to Temple & Young (2004) the act of translation can be a form of analysis or interpretation, as the translator assumes the role of both cultural broker and analyst. If in fact some degree of analysis happened before and during the translation to English this could have biased the sample considerably. I was careful with minimizing bias by cautiously and explicitly discussing meanings and understandings of words used and the full questions and other concepts used with the translators. However, it is possible that this stands for yet another bias as there is no way of knowing if, and to what degree, they really understood everything and if they were translating correctly. Also there is the simple act of translating from one language to another to consider. It is possible that the respondents brought forth valuable insights that may have gotten lost in translation. However, I lowered the risk of bias and ensured correctness of the interviews and analysis by relying on more than one translator (sometimes up to three) translators at a time during each interview. This minimized bias as the translators could help each other out. I also had translators that were familiar and originated from the area as well as a translator from another area in Kenya. All translators used were however all Maasai and thereby I ensured they were accustomed to cultural values and costumes. Lastly I made sure that they were familiar with the study and all relevant languages.

For the second part of the data collection no translators were used and the interviews were solely done by my fellow student Maria and myself. This, of course, eliminated much of

chance bias that originated from the use of translators, however it did introduce new ones. It introduced a selection bias that could have occurred when people themselves were given the choice to participate or not after hearing the interview subject. It is possible that people with strong opinions or substantial knowledge are more willing to spend time answering participating in this study than those who do not. This will in turn affect the outcome of the study. Second to last, the bias of our own presence during the interviews has to be mentioned. I was present during all interviews, in both parts of the data collection. This is in itself a way of minimizing chance bias, by being able to see and hear the response of the interviewees and getting the translation right away, as well as being able to ask counter questions and get deliberate responses. However, it is possible that our presence could influence the respondents' answers. There is no way of knowing how trustworthy the respondents are being. It is a possibility that our background as university students from Sweden, doing research about conservation, made them put on a more positive attitude than they actually have.

The choice of method as well as the duration of these could have influenced the results. If I instead had made a survey addressing the same topic this could have produced different results. Also the length of the tests might have influenced the participant's response. A long interview may sway the respondents' willingness to answer explicitly in the late stages of the interview. Lastly there is the sample size to consider. The sample for this study was relatively small with only a few individuals being selected. This may very well have influenced our results and the results in this study can only be representative for the group of people studied. To get a higher security and to be able to draw bigger conclusions a much greater sample needs to be researched, which was not possible in this bachelor thesis.

## **CONCLUSION**

It was found that, although some variations occurred between the samples, the majority of the respondents (both rural and urban) showed positive attitudes towards wildlife conservation in general. Both sample groups were also found to perceive wildlife conservation to be of importance. However, marked differences in values behind these attitudes were evident between the two samples. The rural sample showed a strong utilitarian attitude towards wildlife and the conservation of wild animals. Within the urban sample group several different values were represented, most being aesthetic, utilitarian or humanistic, few also being egocentric, negativistic and moralistic.

Although the sample size in my study was small and the results are only representative for this group of people, I can, with help of the already existing literature, conclude that place of residence does influence values, which in turn can affect attitudes towards wildlife conservation and affect the outcome of conservation efforts. Consequently, it is important to involve the general public as well as rural communities in conservation work as this would increase the success.

With the results found in this study it can also be concluded that the conservation employed at the Shompole and Olkiramation Group Ranches are working successfully. Further this study indicates that conservation projects can be positive with these conservancies as an example. It is clear that the conservancy movement in the rural area markedly changed the attitudes of the locals and the communities are now integrating wildlife, as well as beginning to integrate tourism initiatives into their livelihood strategies.

## **POPULÄRVETENSKAPLIG SAMMANFATTNING**

Kenya är hem till många unika och utrotningshotade vilda djur. Många av dessa djurpopulationer minskar idag i antal och hotas som följd av utrotning. En anledning till denna minskning är ökningen av människa-vilt-konflikter. Dessa konflikter, som uppstår mellan natur och människa, går att finna över hela världen och i Kenya är denna typ av konflikt ett vidspritt problem som ställer till stora svårigheter i viltbevarandearbetet.

När det kommer till bevarandeprojekt är det nödvändigt att arbeta, inte bara med de direkt påverkade faktorerna så som djur och natur utan även de närstående samhällena och lokalinvånarna. Människa-vilt-konflikter är som vanligast i områden där människor och djur lever sida vid sida. Konflikterna finns att se över hela världen men intensifieras i utvecklingsländer, som t.ex. Kenya, där landsbygdssamhällena är de som drabbas hårdast. Studier som tar upp landsbygdsbors känslor och åsikter gentemot djur och natur är därmed till stor hjälp för att kunna säkra en framtid för båda parter.

I detta sammanhang är det även viktigt att vidkänna att bevarandet av vilda djur tills stor utsträckning är beroende av allmänhetens acceptans. Men en stor andel av landets invånare boendes i städer är det viktigt att därmed även få insikt om stadsbors åsikter och attityder. Stadsbors uppfattning om djur och natur kan skilja sig radikalt från landsbygdsbors, då de lever ett helt annorlunda liv. Många gånger lever man i städer helt isolerat från naturen. Detta kan leda till en minskad förståelse för denna och i värsta fall även till apati vilket i sin tur har en påverkan på bevarandeprojekt.

Folks attityder och åsikter om viltbevarande påverkas av en mängd faktorer. En av dessa faktorer, som kan ha en djupgående inverkan på människans uppfattning och attityd mot bevarandet av vilda djur, är hemort. Denna studie inriktade sig på att undersöka vilka attityder och uppfattningar kenyanska medborgare har angående viltbevarande, där tyngdpunkten placerades på landsbygdsperspektiv kontra stadsperspektiv.

Genom studien så framkom det att en klar majoritet av svaranden (både landsbygd och stadsbygd) visade positiva attityder mot bevarande i allmänhet, även om vissa variationer fanns mellan stad och landsbygd. Resultatet visade även att landsbygdsborna hade en mycket mer positiva attityder än vad förväntats utifrån tidigare publicerade studier. Studien visade också på stora skillnader i värderingar mellan de två studerade grupperna. Stadsborna uppvisade en stor variation av olika värderingar mot naturen, medan alla landsbygdsbor delade samma människocentrerade synsätt. Denna upptäckt tyder på att värderingar spelar en stor roll i människors uppfattning av vilda djur och natur och som ett resultat kan det ha djupgående effekter på viltbevarande. Vidare visade studien att bevarandearbete kan vara svåra att få att fungera men visade samtidigt på att samhällsbaserade bevarandeprojekt kan vara en bra lösning på detta.

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## REFERENCES

- Adams, W. M., & Humle, D. 2001. If community conservation is the answer in Africa, what is the question? *Oryx*. 35, 193-200.
- Akama, J. S., & Kieti, D. 2007. Tourism and Socio-economic Development in Developing Countries: A case study of Mombasa resort in Kenya. *Journal of Sustainable Tourism*. 15, 735-748.
- Akama, J. S. 1998. The evolution of wildlife policies in Kenya. *Journal of Third World Studies*. 15, 102-117.
- Arcury, T. A., & Christianson, E. H. 1990. Environmental world-view in response to environmental problems: Kentucky 1984 and 1988 compared. *Environment & Behavior*. 22, 387-407.
- Arjunan, M., Holmes, C., Puyravaud, J.P., & Davidar, P. 2006. Do developmental initiatives influence local attitudes toward conservation? A case study from the Kalakad–Mundanthurai Tiger Reserve, India. *Journal of Environmental Management*. 79, 188-197.
- Awour, C. B., Prindi, V. A., & Adewera, A. O. 2008. Climate change and coastal cities: the case of Mombasa, Kenya. *Environment & Urbanization*. 20, 231- 242.
- Berenguer, J., Corraliza, J.A., & Martín, R. 2005. Rural-Urban differences in environmental concern, attitudes, and actions. *European Journal of Psychological Assessment*. 21, 128-138.
- Bjerke T., Reitan O., & Kellert S. R. 1998. Attitudes toward wolves in southeastern Norway. *Society and Natural Resources*. 11, 169-178.
- Brockington, D. 2004. Community conservation, inequality and injustice: myths of power in protected area management. *Conservation & Society*. 2, 411- 432.
- Campbell, D.J., Gichohi, H., Reid, R., Mwangi, A., Chege, L., & Sawin, T. 2003. Interactions between people and wildlife in southeast Kajiado district, Kenya. LUCID Working Paper, 18. Nairobi: International Livestock Research Institute.
- Distefano, E. 2005. Human-Wildlife Conflict worldwide: collection of case studies, analysis of management strategies and good practices. Rome, Italy, FAO.
- Ericsson, G., & Heberlein, T. A. 2003. Attitudes of hunters, locals, and the general public in Sweden now that the wolves are back. *Biological Conservation*. 111, 149-159.
- Gadd, M.E. 2005. Conservation outside of parks: attitudes of local people in Laikipia, Kenya. *Environmental Conservation*. 32, 50-63.
- Goodman, R. 2002. Pastoral livelihoods in Tanzania: Can the Maasai benefit from conservation? *Current Issues in Tourism*. 5, 280-86.
- Gusset, M., Maddock, A. H., Gunther, G. J., Szykman, M., Slotow, R., Walters, M., Somers, M. J. 2008. Conflicting human interests over the re-introduction of endangered

- wild dogs in South Africa. *Biodiversity & Conservation*. 17, 83–101.
- Hazzah, L., Mulder, M. B., & Frank, L. 2009. Lions and Warriors; Social factors underlying declining African lion populations and the effect of incentive-based management in Kenya. *Biological Conservation*. 149, 2428-2437.
- Huntington, H. P. 2000. Using traditional ecological knowledge in science: Methods and applications. *Ecological applications*. 10, 1270-1274.
- Kawall, J. 2003. Reverence for life as a viable environmental virtue. *Environmental Ethics*. 25, 339-358.
- Kellert, S. R. 1992. Public Attitudes toward Bears and Their Conservation. *Bears: Their Biology and Management*. 9, 43-50.
- Kenya Wildlife Service – Wildlife-Human Conflicts; Sources, Solutions and Issues. 1996. Available at: <http://www.safarilink.com/kwild/wildlife.htm>.
- Kock, R. A. 2005. Chapter 1. What is the infamous "wildlife/livestock disease interface?" A review of current knowledge for the African continent. In: *Conservation and development interventions as the wildlife/livestock interface*. Ed. Osodsky, S. A. IUCN.
- Lagendijk, D. D., & Gusset, M. 2008. Human-Carnivore coexistence on communal land bordering the Greater Kruger Area, South Africa. *Environmental Management*. 42, 971-976.
- Lambin, E. F., & Mertens, B. 2001. Abrupt and periodic shifts in a marsh location and their impact on biodiversity and farming activities in Shompole, Kenya. *International Journal of Remote Sensing*. 22, 711-716.
- Lindsey, P.A., du Toit, J.T., & Mills, M.G.L. 2005. Attitudes of ranchers towards African wild dogs *Lycaon pictus*: Conservation implications on private land. *Biological Conservation*. 125, 113-121.
- Luhnerini, M & Merino, M. J. 2008. Perceptions of human-carnivore conflicts in the high andes of Argentina. *Mountain research and development*. 28, 81-85.
- Marker, L.L., Mills, M.G.L., & Macdonald, D.W., 2003. Factors influencing perceptions of conflict and tolerance toward cheetahs on Namibian Farmlands. *Conservation Biology* 17, 1290–1298.
- McCabe, J.T., Perkins, S., & Schofield, C. 1992. Can conservation and development be coupled among pastoral people? An examination of the Maasai of the Ngorogoro Conservation Area, Tanzania. *Human Organization*. 51, 353-366.
- Mishra, C., Allen, P., McCarthy, T., Madhusudan, M. D., Bayarjargal, A., & Prins, H. H. T. 2003. The role of incentive programs in conserving the snow leopard. *Conservation Biology*. 17, 1512-1520.



Morris, D.L., Western, D., & Maitumo, D. 2008. Pastoralist's livestock and settlements influence game bird diversity and abundance in a savanna ecosystem of southern Kenya. *African Journal of Ecology*. 47, 48-55.

Murphree, M.W. 2000. Community-based conservation: old ways, new myths and enduring challenges. Conference on African Wildlife Management in the New Millennium, Mweka, Tanzania. December.

Nepal, S. K., & Weber, K. E. 1995. Prospects for coexistence: wildlife and local people. *Ambio*. 24, 238-245.

Newmark, W.D., Leonard, N.L., Sariko, H.I., & Gamassa, D.G.M. 1993. Conservation attitudes of local people living adjacent to five protected areas in Tanzania. *Biological Conservation*. 63, 177-183.

Nsanjama, H. 1993. Introduction. In *Voices from Africa: Local Perspectives on Conservation*. World Wildlife Fund, Washington D.C., USA.

Olsson, H., & Sörenson, S. 2007. *Forskningsprocessen. Kvalitativa och kvantitativa perspektiv*. Liber AB, Stockholm.

Romañach, S. S., Lindsey, P. A., & Woodroffe, R. 2007. Determinants of attitudes towards predators in central Kenya and suggestions for increasing tolerance in livestock dominated landscapes. *Oryx*. 41, 185-195.

Sekhar, N.U. 2003. Local people's attitudes towards conservation and wildlife tourism around Sariska Tiger Reserve, India. *Journal of Environmental Management*. 69. 339-347.

Stander, P. 1993. *Conserving large African carnivores in a developing world*. Ministry of Wildlife Conservation and Tourism, Grootfontein, Namibia.

Temple, B. & Young, A. 2004. Qualitative research and translation dilemmas. *Qualitative Research*. 4, 161-178.

Tomicevic, J., Shannon, M. A., & Milovanovic, M. 2009. Socio-economic impacts on the attitudes towards conservation of natural resources: Case study from Serbia. *Forest Policy and Economics*. 12, 157-162.

Infield, M. 1988. Attitudes of a rural community towards conservation and a local conservation area in Natal, South Africa. *Biological Conservation*. 45, 21-46.

Van Liere, K. D., & Dunlap, R. E. 1981. Environmental concern: Does it make a difference how it's measured?. *Environment & Behavior*. 13, 651-676.

Western, D., Russell, S. & Cuthill, I., 2009. The Status of Wildlife in Protected Areas Compared to Non-Protected Areas of Kenya. *PLoS ONE*. 4, 6140.

Wishitemi, B. E. L., & Okello, M. M. 2003. Application of the protected landscape model in southern Kenya. *Parks*. 13, 12-21.

## APPENDIX 1

### Interview questions

#### Part 1: Wild animals

- 1) What is your personal *opinion* about wild animals?
- 2) Were you brought up in a city or a village?
  - Did your parents own any farmland and/or livestock (cattle, sheep, goats)?
- 3) Do you consider any wild animals as an asset, benefit, something positive?
  - In what way do they contribute to something positive?
- 4) Do you personally perceive any wild animals as a problem?
  - Have *you* had any problems with:
    - Predation?
    - Destruction of fields/crops caused by wild animals?
    - Diseases brought by wild animals?
    - Co-grazing → that the wild animals eat the livestock's food?
- 5) Do you think these experiences have influenced your opinions towards wild animals?
  - In what way?

#### Part 2: Conservation

- 1) Do you think you have knowledge about the purposes of conserving and protecting the wide range of wild animal species in Kenya?
- 2) What is your opinion about conservation of wild animals?
  - Do you feel it's necessary?
  - Why?
- 3) Has your opinion changed since you were a child?
  - How and why?
- 4) Do you consider the cost of conservation as an investment or a cost?
  - For yourself?
  - For the country?
- 5) Do you consider any wild animals as a problem in general?
  - For Kenya as a country?
  - For the economy?
  - For the farmers?

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