

# Examining Human Wild Life Conflict in Africa

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**Abstract**--Human-wildlife conflict is identified as one of the main threats to the continued survival of many species in different parts of the world. The article is a theoretical research aimed at examining human-wildlife conflicts in the continent of Africa. Data for the research was gathered through documented sources of the conflicts. The results have shown that as human population expand and natural habitats shrinks, people and wildlife are increasingly coming into conflict over living space, food and other economic resources. Encroachment of forest areas for agriculture, developmental activities, livestock grazing are some key reasons for increment of the conflict in countries such as Kenya, Namibia, Mozambique, Zambia, Nigeria etc. The conflict brings negative effects animal death, loss of human life, crop damage, damage to property, injuries to people and wildlife etc. The potential solutions should include protection of wild life reserves, land use planning, community based natural resources management, compensation payment, ecotourism, dissemination of wild life awareness among others. This beside creative and effective methods, innovative technologies to resolve the conflict and assistance to African countries by World Wildlife Fund, Pan-African Conservation Foundation and other Non-Governmental Organizations.

**Keywords**-- Examining, human , wildlife, conflict, Africa

## I. INTRODUCTION

**H**UMAN-wildlife conflict is defined as any interaction between humans and wildlife that results in negative impacts on human social, economic or cultural life, on the conservation of wildlife population, or on the environment. It occurs when human or wildlife are having an adverse impact upon the other [1]. Human-wildlife conflict is thus any interaction between humans and wildlife which cause harm whether to the human, the wildlife or property. A human-wildlife conflict is identified as one of the main threats to the continued survival of many species in different parts of the world, and is also a significant threat to the local human population [2]. Conflicts between humans and wildlife have occurred since the dawn of humanity. They occur on all continents, in developed as well as developing countries, yet the problem varies according to the particular environment and peoples way of life [3]. [According to World Wildlife Fund (WWF) as human population expands and natural habitats shrink, people and animals are increasingly coming into conflict over living space and food. From Baboons in Namibia attacking young cattle, to one-horned Rhino in Nepal (Asia) destroying crops, to European bears and wolves killing livestock in countries of Europe, to Rocky mountain ELK attacking people in

the US (North America), to Jaguars predating on livestock in Brazil (South America) and attacks by Australian Magpies on humans – the problem is universal[2].

Human wildlife conflict is a serious obstacle to wildlife conservation and is becoming more prevalent as human population increase, development expands, the global climate changes and other human and environmental factors put people and wildlife in direct competition for a shrinking resource base [4].

This theoretical research focuses on Africa a continent with lots of wildlife and the people predominantly lived in rural areas and many people engaged in primary production such as farming, nomadic herding, fishing and mining. It is based on this reasons that human-wildlife conflict is particularly prevalent in the continent. The problem of human-wildlife conflict is particularly common and pronounced as rural and peri-urban communities are affected all over the continent [3].

The paper aims at examining generally human-wildlife conflict in the continent of Africa.

## II. CAUSES OF HUMAN-WILDLIFE CONFLICTS

There are many causes of human wildlife conflicts the major areas are highlighted below:

### A. Encroachment into forest areas

In Africa a large percentage of the population depend on nature for their source of livelihoods. Clearing of the forest areas for food and crop production destroys the natural habitats of wildlife. Wildlife attack humans during such clearings as humans encroach into their territories. The encroachment of people into the forests of the democratic Republic of Congo (DRC) has led to the cutting down of hardwood trees to make charcoal and cause conflict with mountain gorillas that live in the forest [5]. The gradual loss of habitat has led to increasing conflicts between humans and wildlife. As wildlife range becomes more and more fragmented and wildlife is confined into smaller pockets of suitable habitats, humans and wildlife are increasingly coming into conflict with each other[3]. Suitable habitats for wildlife today exist mainly in protected areas.

### B. Development projects

There are many development projects in the continent of Africa that directly resulted in human-wildlife conflicts. Some of these development projects include roads and railway construction projects, dam construction projects, housing and infrastructure projects energy production projects and many more. Many of these projects modify negatively wildlife habitats either directly or indirectly [3]. Many roads and

railways tracts cut across wildlife habitats and vehicles are involved in accidents when wildlife either cross or lie on the roads. Dam construction creates idle habitats for crocodiles and it also attracts human inhabitants which favours potential human-wildlife conflict. Energy projects such as wind farms obstruct movement of wildlife that fly such as birds. Besides this, in some countries such as Nigeria, development projects were conceived and executed without a standard Environmental Impact Assessment (EIA).

### C. Livestock Grazing

Africa has a sizeable proportion of its people that were traditionally livestock rearers. Examples include the Fulanis of West Africa, the Masai of East Africa and the Bantus of Southern Africa. These people rear cattle, sheep, goats etc by moving from one place to another in search of pasture grass and water mainly on seasonal basis within a country or across national boundaries. During the course of this migratory movement their cattle are attacked by wild animals that are carnivours such as lions, leopards, hyena. According to WWF leopards still kill sheep within 100km of Cape Town South Africa and lions kill cattle around that outskirts of Nairobi, Kenya [3].

### D. Human Population Expansion

The human population has been expanding over the years at the detriment of other species that inhabit the planet such as animals in the wild. The population expansion is particularly high among the developing nations like those in Africa. Population expansion in many African countries has led to uncontrolled urban sprawl where settlements have encroached into wildlife habitats causing conflict. Peri-urban communities all over the continent have been living with fear of attack on themselves and their properties. Baboons for example, raid gardens and foods in lodges and camping areas and can cause an immense nuisance in small urban settlements. Population expansion in the continent have led to the transformation of forests, savannah and other ecosystems into agrarian areas or urban agglomerates as a consequence of the increasing demand for land, food production, energy and raw materials which has led to a dramatic decrease in wildlife habitats.

### E. Effects of climate change

The effects of climate change in the continent are increasing the frequency of human-wildlife conflicts. The effects include floods, heavy rainfall, changes in rainfall patterns, high temperatures, droughts, rising sea levels and increase in environmental refugees [6].

The 2012 Nigeria floods brought crocodiles, hippopotamus and snakes into homes and communities in central parts of the country causing conflicts as people chase them out for their own safety [7]. Severe droughts in parts of the continent reduce the quality of most wildlife habitats and forced some animals to seek refuge in farmlands of people. Furthermore climate change has altered migratory routes and timings of species that use both seasonal wetlands (e.g migratory birds) and track seasonal changes in vegetation (e.g herbivours).

This has increase conflict between people and large herbivours such as elephants [8].

## III. EFFECTS OF HUMAN-WILDLIFE CONFLICTS

Human-wildlife conflicts have many effects on both the people and wildlife. The major ones are highlighted below:

### A. Loss of human life

Human-wildlife conflicts in Africa have historically resulted to loss of human life which is the most severe manifestation of the conflict according to WWF. In Tanzania, home of world's largest lion population lions attacks were widespread and between 1990 and 2004 lions killed at least 563 people. In Kenya more than 200 people were killed by elephants from the year 2000 – 2007. Crocodiles also cause large number of human death in Mozambique, Namibia and Zambia many of the deaths go unreported[3]. It can be observed that large mammalian carnivours are responsible for fatal human attacks on humans and large herbivours such as elephants. Those killed are farmers, fishermen and other people who go to collect fuel wood or water in rivers or streams.

### B. Animal Death

Many wild animals died as a result of the conflict some of the deaths results due to revenge attacks by people when wild animals killed people or caused serious damage to human properties. Others were killed as human try to exploit resources that are found in wildlife habitats. For example a family of mountain gorillas was found slaughtered in July 2005 by people who cut down hardwood trees for charcoal production [5]. As humans are superior to wildlife one of the consequences of the conflict is the death of the animals as they are easily killed with guns or any other weapon. It is because of this that human-wildlife conflict is a major obstacle to wildlife conservation in the continent.

### C. Injuries to people and wildlife

Injuries to people mostly occur as a result of chance encounters with elephants, buffalo, lions and hippopotamus, usually as people walk along paths from their houses to the farm or water source e.g a river or stream. The injuries can be minor such as a scar or major such as amputation of limbs leading to permanent disability. The wildlife is also injured as a result of the conflict, as some wildlife escape with injuries when humans attempt to kill them particularly during revenge attacks. The wildlife also get injured when humans attack them in order to stop wildlife that raid crops, attack domestic animals or cause damage to human properties[9].

### D. Crop Damage

Wildlife have for many years been responsible for extensive damages to crops planted on farmlands particularly in rural areas of Africa. Crop damage is the most prevalent form of human-wildlife conflict across the African continent. A variety of vertebrates animals come in conflict with farming activities in Africa. These include birds, rodents, primates, antelopes, buffalos, hippopotamuses, bush pigs and elephants[3]. Elephants in particular are identified to be the greatest threat to African farmers [10]. The elephants have

cause severe and extensive damage to crops in Zimbabwe, Ghana, Benin Republic, Mozambique, Malawi etc. and the elephants are considered a threat to food security. Crops raided during the planting season include maize, millet and sorghum and do break into storage bins and steal grains. Hippopotamus cause substantial damage to farmlands close to rivers or lakes such as rice, vegetables and other crops.

#### E. Damage to Properties

Wildlife have caused extensive damage to properties which include people's homes, huts, storage bins, crops, domestic animals, exotic vegetation and human infrastructures. In village wildlife like elephants are known to have destroyed people homes, huts storage bins that they come across as they raid villages and farmlands. Elephants also damage infrastructures such as ponds tracks and water installations [3]. Lions and other large carnivours attack and kill cattle belong to farmers and pastoral herdsman particularly in East Africa. Baboons and monkeys are known to have cause damage to banana plantations and gardens. Crocodiles are involved in theft of fish from fishing nets and associated damage to fishing gear.

### IV. POTENTIAL SOLUTIONS

The effects of human-wildlife conflicts are negative and impacts negatively on both human and wildlife as highlighted in the paper. It is also a serious obstacle to the conservation of the abundant wildlife species of the African continent. It is based on these reasons that there is the urgent need for potential solutions to resolve the conflicts which are:

- There should be the protection of wildlife particularly in the reserves so that they do not move out to cause any harm or damage to people's properties. Wildlife outside reserves should be protected through enacting appropriate laws and legislation to reduce those who consider wildlife as bush meat especially in countries like Nigeria.
- There is the urgent need for proper and effective land use planning whereby various land uses are specified and clearly demarcated. This is to ensure that settlements and other forms of human development projects do not encroach into lands and areas that are used by wildlife. This is important as in many African countries there is increasing encroachment into areas that were over the years used by wildlife.
- There should be compensation payment by the government to the poor rural farmers that have suffered damage of crops and properties due to wildlife. This is vital in order to stop revenge killings and provide a consolation to the affected farmers who in many instances cannot deal with the problem or bear the loss.
- There should be dissemination of wildlife awareness that is aimed at emphasizing the value and importance of wildlife the ecosystem, tourism and overall development. This awareness is to stop the negative attitude of the African rural people who see animals purely in terms of their meat value or pests that have to be eliminated.

- There should be effective Environment Impact Assessment (EIA) to ensure that development projects carried out by government to not result to conflict with wild animals. The EIA has to identify and evaluate the potential impacts (both beneficial and adverse) of development projects on the environmental system (including social systems)[11].
- Promotion of ecotourism is a good way of resolving the conflict. Ecotourism aims at developing and managing tourism such that the environment is preserved [12]. In this case the wildlife should be preserved so that people can come to view and appreciate the local wildlife in an area.
- African people particularly those affected by the conflict should continue to find creative and effective methods of resolving the conflict and also continue to evolve innovative technologies that can prevent the occurrence of conflict with wildlife.
- There should be assistance to African countries aimed at resolving human-wildlife conflict by WWF, Pan-African Conservation Foundation and other non-governmental organization that are focused on wildlife conservation. Some of the areas the assistance should be on area in compensation payment and creating wildlife awareness.

### V. CONCLUSION

Human-wildlife conflict has been occurring since when the first set of humans set foot on earth. It has increased worldwide as a result of increase in human population particularly in the developing countries such as those in Africa. Furthermore majority of the population are engaged in agricultural production such as farming, livestock grazing and fishing which increases the prevalence of the conflict than in some other continents. This conflict is a setback to wildlife conservation in the content and worldwide. It is based on this that there is the urgent need to adopt the potential solutions put forward in this paper for peaceful co-existence between humans and wildlife.

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