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Wild Life/Wild Animals in Ethiopia: Types, Challenges and Conservation

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Abstract

Ethiopia is a country with a wide range of biological species, primarily huge mammals. The main priority for maintaining animal resources is protected areas, which also help a country's economy grow. A great variety of biological species, particularly enormous mammals, can be found in Ethiopia. Protected areas should be given top priority for protecting wildlife resources because they also boost a nation's economy. They do, however, struggle to meet the needs of both people and animals. Even though most communities believe they are protected, even when places and species benefited from conservation initiatives, the lack of incentives made locals less inclined to support them. Maintaining protected areas is crucial to biodiversity conservation because it makes it impossible to sustainably utilize animals for development. Therefore, mitigating and preventive strategies for conservation measures are needed in order to manage wildlife in a sustainable way.

Keywords: conservation, management strategies, wildlife resources, challenge, threat.

1. Introduction

Ethiopia is one of the world's greatest biodiversity centers, located at 3 30'N and 15 00'N latitudes and 33 E and 48 E longitudes in the horn of Africa (Amare A, 2015). Ethiopia is one of the world's top 25 biodiversity hotspots, with two of the world's 34 biodiversity hotspots, the Eastern Afromontane and the Horn of Africa hotspots (EBI, 2014). The country's biogeography is characterized by two different features: the arid horn of Africa (Ogaden) and the mosaic highland plateau (Young J, 2012), which result in an exceptionally diverse and unique flora and fauna. This wildlife diversity is a big draw for tourists; nature-based tourism helps the country's economy and protects the country's future protected areas (Vreugdenhil *et al*., 2012). From the desert of the Danakil Depression, the world's lowest dry land point at 116 meters below sea level, to Ras Dashen Mountain (Africa's second-highest peak and roof) at 4543 meters above sea level, the country boasts a diverse and contrasting landscape (Tefera M, 2011). The country's 1.3 million hectares (of which 1.12 million are land) with a diverse climate, geography, and vegetation maintain the country's high indigenous flora and

fauna, attracting regional and international tourists (Young J, 2012).

Ethiopia has a land mass of around 1,127,127 km2 (IBC, 2014), with a very diverse topography. As a result, Ethiopia is endowed with tremendous wildlife potential, high endemism, and breathtaking landscapes that can support a thriving tourism economy (SDPASE-EWCA, 2015). The existence of a diverse range of ecosystems has provided Ethiopia with a wide range of habitats, which has resulted in a high level of faunal diversity. However, data on the country's faunal resources is limited to mammals, birds, reptiles, amphibians, and a few categories of arthropods as a whole. Ethiopia is one of the world's most geographically and biologically varied countries. The country's biological resources are spread out throughout numerous biomes, including the Afro-Tropical Highlands, Sudan-Guinean, Sahel-Transitional Zone, and Somali Masai Biome. Within these major biomes, the country has a lot of potential and a wide range of national and global wildlife resources.

Wildlife refers to the genetic, species, and environmental diversity of all living animals found in the wild on Earth. There are around 860 bird species (16 endemic species and two endemic genera), 279 mammalian species (31 endemic species and six endemic genera), 201 reptile species (14 endemic species), 23 amphibian species (23 endemic species), and 150 freshwater fish species in Ethiopia (6 endemic species). Ethiopia is home to 279 mammalian species, 31 of which are endemic, including the Walia Ibex (Capra walie), Gelada Baboon (Theropithecus gelada), Mountain Nyala (Tragelaphusbuxtoni), Ethiopian Wolf (Canissimensis), Starcks Hare (Lepusstarcki), Ethiopian Wolf (Canissimensis), (EWCA, 2015).

The legacy of wildlife resources exists partly due to a network of protection areas covering various biomes and habitats, and partly due to the fact that wild lands have been scarcely used or modified by humans. However, the obstacles facing Ethiopian wildlife conservation are growing increasingly formidable. Because agricultural productivity is so low, raising food production necessitates expanding the regions under cultivation and grazing. These expansions usually come at the expense of wildlife resources, resulting in the extinction of flora and fauna as well as their ecosystems (Amare, 2015). Laws aimed at conserving wildlife resources for the benefit of local people continue to be difficult to implement, and animal resources continue to be encroached upon and destroyed across the country.

Furthermore, as a result of the regionalization process, the lack of defined policy and regulations defining the framework of administrative procedures has become crucial for the country's long-term management and development of natural resources. The responsibility for most of the protected areas has been transferred on to Regional Governments without a detailed review of the handover's feasibility. Regional governments, on the other hand, confront a lack of technical and management competence to carry out the additional obligations, or at the very least, will take a significant period of time to build up their capacity. As a result, the development of wildlife resources now requires a defined and realistic conservation policy based on nationally directed conservation principles. As a result, the issues that Ethiopia faces in terms of wildlife development necessitate a clear strategy with legal, administrative, technical, and planning frameworks (Tedla S, 1995). These should attempt to ensure the long-term usage and integrity of wildlife resources by harmonizing human and living resource relationships at both the national and international levels for long-term sustainability.

In Ethiopia, the 1960s marked a turning point in the fight to save endangered wildlife species and their habitats. This was the time when the country established the groundwork for modern conceptions of nature and natural resource conservation. The first national park, awash, was established in 1966 as a result of the assessment's recommendations. Since then, a network of wildlife-protected areas has been established in several sections of the country, including

ecologically diverse ecosystems. Previously, the central government was solely responsible for their governing system. However, this strategy has increasingly evolved into a decentralized and inclusive structure incorporating regional states, local communities, hunting operators, and, in particular, non-governmental organizations (NGOs) on a co-management basis.

The conservation of Ethiopia's biodiversity and ecosystems is critical for ensuring sustainable development, mitigating and adapting to climate change, and preventing the collapse of life-sustaining ecosystem services (Young, 2012). Protected areas were established to conserve the world's important biodiversity, according to Gashaw (2015). As a result, these places play an important role in biodiversity conservation. However, it is a sad fact that these ecologically vital resources are frequently undervalued and are under threat as a result of population increase and rising human demand (Zerga, 2015). Protected areas are often referred to as "Paper parks" in poor nations like Ethiopia because the pressure from the poor rural population is greater than the ability to safeguard natural resources from exploitation.

As a result, officially protected areas are frequently still used for traditional livelihood support, as they have been for a long time, and this is not necessarily detrimental if additional resource extraction intensification can be prevented. Rural settlements had frequently already established there when they were designated as protected areas, particularly in new parks, making it impossible to totally restrict their access to resources without compensation. An efficient protected area management approach is one of the greatest ways to achieve nature conservation in a particular ecosystem (Amare, 2015), which necessitates a thorough understanding of the primary elements that influence both the conservation and management of Ethiopian National Parks. The objective of the paper was to understand the Ethiopian wild life with their types and identify challenges affecting conservation and management of national parks.

2. Wild Animals in Ethiopia

Wildlife used to refer to undomesticated animal species, but it has now expanded to include all creatures that develop or exist in the wild without being introduced by people (Usher M. B, 1986). Wild animals are creatures that live in jungles, forests, or natural settings and search for their own food and water. Any mammal, bird, fish, or other wild species equipped with sensation and the ability to move freely is considered a wild animal. Ethiopia, nestled in Africa's horn, is a huge country with a wide range of topography, ancestral bedrocks, and temperatures. This topographic diversity has led in substantial differences in rainfall, humidity, temperature, and soils throughout a 4620-meter altitude range. Six of the world's primary terrestrial biomes (alpine, coniferous forests, deciduous forest, tropical rain forest, savanna, and desert) and nine ecosystem types may be found in the country (BIDNTF, 2010). There are 52 conservation areas with formal protection status throughout these nine ecosystem types. Twenty national parks, three wildlife sanctuaries, two wildlife reserves, seventeen regulated hunting zones, seven open hunting areas, and three community conservation areas are among them (EWCA, 2015). A wildlife sanctuary does not allow people to live inside it, whereas a wildlife reserve allows people to live together while conserving animals (Vreugdenhil *et al*., 2012).

National parks are regions of land that have been set aside to protect native flora and animals, as well as their habitats, natural beauty, historic significance, and indigenous cultures (NSW, 2015). These places are also home to gene banks (for example, for wild coffee and enset) and traditional ecological knowledge, as well as providing a direct economic benefit to the country through tourism and carbon trading (Young, 2012). Four Ethiopian national parks, one wildlife sanctuaries, and three community conservation areas are currently undergoing various forms of international trade mechanisms for climate change mitigation, such as CDM (Clean Development Mechanism, e.g. Humbo) and REDD+ (Reducing

Emissions from Deforestation and Degradation) (e.g. BMNP). This means that international funding contributes to the protection funding. This is critical since Ethiopia is a low-income country with few resources for environmental protection. This is also the case when international conservation NGOs such as the Frankfurt Zoological Society or the WWF provide financing and management advice to national parks.

2.1 Types of Wild Life or Animals in Ethiopia

The tremendous diversity of topography, with wide differences in climate, soils, natural vegetation, and settlement patterns, dictates the richness and variety of Ethiopian wildlife. The southern and western areas of the country, in general, have the highest concentrations of wild life (Young J, 2012). Ethiopia's wild animals can be divided into five categories. These are: common wild animals (those that can be found in many sections of the country); common wild animals (those that can be found in many parts of the country); and common wild animals (those that (e.g. hyenas, jackals), Lowland game animal (which include many herbivores like giraffes, wild asses, zebras etc. and carnivores like lions, leopards, and cheetahs), Arboreal animals are animals that live in trees (which include monkeys, baboons), In the Rift Valley lakes, a variety of birds can be seen. In the highlands, rare animals (gelada baboon and Semien fox; walia-ibex in the Semien Massifs, Nyala in the Arsi Bale massifs) can be found (Amare, 2015).

Table 1. Wildlife (fauna) resources of Ethiopia

Main Category	Sub Category	# of Species	# of Endemic Species
Vertebrates	Mammal	320	39
	Birds	918	19
	Reptiles	240	16
	Amphibians	71	30
	Fish	172	38
Invertebrates	Insects	Arthropod 1225	7 (Butterflies)

Sources: Ethiopian Protected Areas (Young J, 2012)

2.2 Challenges of Wildlife Conservation in Ethiopia

Conservation of Ethiopia's biodiversity and ecosystems is critical for ensuring sustainable development, mitigating and adapting to climate change, and preventing the collapse of life-sustaining ecosystem services. Climate change, habitat loss, degradation, and fragmentation, invasive species, novel pathogens, noise disturbance, light pollution, giant floating trash islands, anthropogenic alteration of the microbiome, ecological traps, inbreeding depression, road kill, microplastics, stressors, subsidized predators, bush meat crisis, wildlife trade, bird-window collisions, trophic cascades The list could go on and on, but such is the litany of challenges that animal species are facing today (Ceballos *et al*., 2020). Even among species that aren't on the verge of extinction, numbers are dwindling (Dirzo et al., 2014): Furthermore, the causes of biodiversity loss are frequently intractable (Tittensor *et al*., 2014). There are multitudes of environmentally important resources that are frequently undervalued and under threat from a variety of causes. The following are some of the significant difficulties facing Ethiopia's protected areas:

2.2.1 Lack of Sense of Ownership

Local communities are one of the most affected stakeholders as a result of the creation of National Parks (Kebede *et al*., 2014). Local communities must thus be included as equal partners in the development and execution of conservation

policies that influence their lands, territories, waters, coastal seas, and other resources, particularly in the creation and maintenance of National Parks (Beltrán, 2000). The acceptance and collaboration of local communities in conservation operations is critical to the effectiveness of protected area management. Despite the fact that the local population is active in various conservation and management activities in Ethiopian national parks, such as providing information about unlawful activity in the parks (Gashaw, 2015), they are not included in park planning and management decisions (Petros *et al*., 2015). This could lead to a better understanding among most society members that the park belongs to the government, which could have an impact on local communities' acceptance and cooperation in current and future conservation activities, as well as their long-term viability, if local communities are fully compensated for their economic losses due to loss of access to natural resources.

2.2.2 Limited Awareness

The creation of awareness should be the initial step in any protected area protection effort (Gashaw, 2015). That is to say, before and after they are established, local populations should be aware of the environmental, social, and economic significance of these regions (Kebede *et al*., 2014). However, the National Parks in Ethiopia are experiencing difficulties as a result of low awareness (Tesfaye, 2017) of the role of these conservation areas for environmental (soil erosion control and getting reliable rain fall in the case of Bale Mountain national park (Asmamaw and Verma, 2013), biodiversity (Berihun, 2016), economic (ecoturism) in the case of Awash national park (Alemayehu, 2011), and c (Aneseyee, 2016). Low community knowledge of the importance of national parks is another issue that impacts Ethiopia's protected regions in the east (Wale *et al*., 2017).

2.2.3 Population Growth

In Ethiopia, population increase has a significant impact on national park conservation and administration (Petros et al., 2016). Existing settlements are growing and new settlements are appearing in previously unsettled and environmentally sensitive areas in Ethiopian national parks (for example, Bale mountains national park (Gashaw, 2015), Awash national park (Zerga, 2015), Gambella national park (Aneseyee, 2016), Semien mountains national park (Aneseyee, 2016) as a result of population growth (for example, Bale mountains national park (Gashaw, 2015), Awash national park (Zerga (UNESCO, 2015). Land-use conversion (conversion of natural vegetation cover to other use types such as farmland, grazing land, human settlements, and urban centers) has an impact on national park conservation and management (Milner *et al*., 2007), because increasing population density leads to increased demand for agricultural land and forest products, forcing people to clear woodland or natural forest for settlements and farmland expansion.

2.2.4 Lack of Coordination

Stakeholders are those who are affected by a proposed intervention, either negatively or favorably, or who can influence the outcome (Karl, 2000). Stakeholders are divided into primary and secondary stakeholders based on their direct or indirect interest (FAO, 1998). The local community and park management are good examples of primary stakeholders since they have a direct interest in the resource, either because they rely on it for their livelihoods or because they are directly involved in its exploitation (Karl, 2000). Secondary stakeholders, on the other hand, are those who have an indirect interest in natural resource management and conservation and/or rely at least partially on wealth or business generated by the resource, as well as intermediaries in the process of delivering aid to primary stakeholders; the best examples are local governments, cooperatives, and higher education institutions (Karl, 2000). Local communities, park management, EWCA, local governments, NGOs, higher education institutions, cooperatives, and the National Biodiversity Institute are among the various players participating in National Park management in Ethiopia (Zerga, 2015).

According to Gashaw (2015) and Zerga (2015), some of the causes of lack of coordination among stakeholders include the establishment of distinct objectives (including a difference in prioritizing objectives) and a lack of mutual respect.

2.2.5 Conflicts over Resources

Conflict refers to a situation in which two or more parties have opposing aims, values, interests, or actions (Teferra & Beyene, 2014). The outcome of rivalry and probable disagreement between two or more parties over the use of one or more scarce resources in the context of natural resource management indicates conflict (Grimble, 1998). As a result, disputes within national parks can be considered as the outcome of various interests, aims, and ambitions held by individuals or groups within legally constituted and isolated surroundings, which all too often result in either a good or negative impact on the resource's usage value (FAO, 2000).

In Ethiopian national parks, there are three types of conflicts: (1) conflict between humans and wild animals (Berihun *et al*., 2016), (2) conflict between park managers (scouts and staff) and communities living in and around national parks (Asmamawu & Verma, 2013), and (3) conflict between different communities surrounding the park (Ashenafi & Leader, 2005). Conflicts between humans and wildlife occur all around the world (IUCN, 2005); nevertheless, developing countries are more vulnerable than developed countries (Berihun *et al*., 2016). Poverty, as well as fast growing human populations and expanding settlements, have been proposed as primary drivers of increased human-wildlife conflict in developing countries (Mwamidi *et al*., 2012). Conflict between park managers and community members is caused by resource usage exclusion, an illegal activity carried out by local or external persons (individually or in a group to obtain park resources), and agricultural damage by wild animals (Berihun *et al*., 2016). Border and resource competition (for example, for grazing land access) are two factors that contribute to conflict between communities surrounding parks (Mulualem & Tesfahunegny, 2016).

2.2.6 Issues of Boundary/Lack of Boundary

The boundary of a national park is critical for preparing its management plan and laying out potential conservation measures for its region, as well as for improving its management (Council of Ministers Regulations No. 163/2008). However, one of the issues that affect the maintenance and management of Ethiopian national parks is the lack of a well-defined and generally agreed-upon border (Petros *et al*., 2016).

2.2.7 Invasive Species

Invasive species are worldwide phenomenons in which exotic species struggle for resources and habitat, modifying the physical environment in such a way that native species are often forced to compete for resources and habitat, resulting in severe economic and ecological implications. There are currently 35 invasive weed species in Ethiopia (e.g. Opuntia ficus-indica, Prosopis juliflora, Argemone mexicana, Lantana camera, Eichhornia crassipes) that are causing harm to native species (Mulualem & Tesfahunegny, 2016; IBC, 2014). Invasive plants have left visible affects in most Ethiopian national parks, particularly in Omo (Opuntia), Awash, Babile Elephant Sanctuary (Prosopis juliflora, Lantana camara, and Parthenium hysterophorous), Yangudi-rasa, and Nechisar (Young, 2012). Some invasive species were purposely introduced as agroforestry species in the awash basin, but are now posing a threat to agricultural land-protected areas in the Awash National Park as an unwanted exotic guest.

2.2.8 Illegal Charcoal Production

In Ethiopia, charcoal is one of the traditional fuels. According to Guta (2012), charcoal production is a major source of income and energy in developing countries in general, and Ethiopia in particular (Chanie and Tesfaye, 2015). People cook with charcoal because it is a cheap commodity that requires low-cost, accessible, and widely available metal or ceramic stoves in the market, as opposed to electric and gas stoves (Luoga *et al*., 2000). Aside from its applications,

charcoal manufacturing is currently posing a danger to Ethiopia's national park protection and administration (Berihun *et al*., 2016).

2.2.9 Climate Change

Climate change is having an influence on ecosystems and the services they provide (Keenleyside *et al*., 2014). Climate change, according to IBC (2014), is one of the most serious direct threats to Ethiopia's biodiversity, driven by greenhouse gas emissions, deforestation, and unsustainable land use practices. National parks and other conservation areas in the country are currently threatened by climate change (Mekonen *et al*., 2017). Climate change has caused a shift in species migration and distribution (by limiting suitable habitats and increasing the pace of habitat fragmentation), as well as an increase in invasive species such as acacia drepanolobium (IBC, 2014). Climate change, according to Biru *et al*. (2017), is one of the factors that has reduced the number of pastoralists' cattle in the Awash National Park area, which may increase the people's reliance on the park for their livelihoods in the future (Young, 2012).

2.2.10 Poverty

Ethiopia is one of the world's poorest countries, with low income and productivity, limited capital accumulation and investment, and high unemployment (Moges, 2013). Apart from poverty, the country is one of the world's top 25 biodiversity-rich countries, and it is home to two of the world's biodiversity hotspots, the Eastern Afromontane and the Horn of Africa (WCMC, 1994). However, the country's biodiversity is currently threatened and declining owing to a variety of factors. Poverty, according to IBC (2014), is one of the causes of biodiversity degradation since people are dependent on biodiversity or other natural resources in the country.

2.3 Wildlife Conservation in Ethiopia

The process of protecting animal and plant species in their native habitats is referred to as wildlife conservation. The primary goal of wildlife conservation is to protect animals while also preserving nature and natural habitats for humans and wildlife. Wildlife, as a component of the world's ecosystems, contributes to the balance and stability of natural processes. Protecting wildlife in their natural habitat can be accomplished by creating protected areas such as national parks and wildlife sanctuaries. Endangered and vulnerable species can be kept in captivity and reproduced to expand their population in places like zoos. Wildlife conservation strives to keep wildlife populations healthy, keep animal populations in harmony with their ecosystems, track current habitat conditions and breeding numbers, and prevent species extinction. Due to the harmful effects of human activities, wildlife conservation has become a more significant discipline. Wildlife discussion raises awareness of the significance of wildlife in terms of aesthetic, scientific, and ecological qualities (IBC, 2014).

Wildlife is significant in a variety of ways. Wildlife's relevance can be classified as ecological, economic, investigative, and biological diversity conservation, among other things. Wild animals can be employed for scientific and educational research (useful information for medical and environmental studies), physical and mental recreation (aesthetic value), tourism marketing (economic value), domestication potential, and ecological balance maintenance. To avoid the extinction of species, national parks, sanctuaries, community conservation zones, botanical gardens, and wildlife reserves have been constructed in Ethiopia, covering almost 100,000 square kilometers. There are 21 large national parks, two major wildlife sanctuaries, three wildlife reserves, six community conservation zones, two wildlife rescue centers, 22 regulated hunting areas, two botanical gardens, and three biosphere reserves in Ethiopia. Many of Ethiopia's national parks have different animal turnovers, despite the fact that

the number and dominant animals may vary. Buffaloes, zebras, lions, elephants, ostriches, giraffes, oryx, African wild asses, and other animals are among them.

The Ethiopian Wildlife Conservation Authority (EWCA) is a government agency under the Ministry of Culture and Tourism that is responsible for the conservation and sustainable use of Ethiopia's wildlife. On wildlife conservation, the Ethiopian Wildlife Conservation Authority collaborates closely with national and international parties. It actively engages in a variety of seminars, experience-sharing workshops, conferences, and other important gatherings on issues such as wildlife conservation, biodiversity, ecology (ecosystem management), environmental management, and other related subjects (Yalden, 1992). The Ethiopian Wildlife Conservation Authority was founded in 2008 with the goal of managing "national and global significance" national parks and wildlife sanctuaries. Ethiopian Wildlife Conservation Authority, which was previously under the Federal Ministry of Culture and Tourism (MoCT) but is now under the newly constituted "Environment, Forest and Climate Change Commission," develops and manages tourism in protected areas and controls the hunting sector. The United Nations Development Program (UNDP) awarded the Ethiopian government $7.2 million in 2017 with financing from the Global Environment Facility (GEF) to improve management and law enforcement in Ethiopia's protected areas.

There are currently 73 wildlife protected areas divided into six management types. 27 national parks, 2 wildlife refuges, 6 wildlife reserves, 25 regulated hunting areas, 5 biosphere reserves, and 8 community conservation areas are among them. They cover around 8.3 percent of the country's total land mass (9, 3182 km2). This system of protected areas encompasses all of the country's key ecosystems. The high diversity of organisms has been attributed to the different ecosystems and changing climate conditions (Yalden, 1992). So far, 320 mammalian species (57 endemic), 926 bird species (18 endemic), 242 reptile species (15 endemic), 73 amphibian species (30 endemic), 180 fish species (41 endemic), roughly 6500 vascular plant species (700 endemic), and 6862 insect species have been identified (Usher M B, 1986). Ethiopia has taken a number of steps to protect wildlife and the environment. Institutional and policy structures, as well as legal mechanisms, are among them.

Since the mid-1980s, Ethiopia has been grappling with a wildlife conservation catastrophe. However, the Ethiopian Wildlife Conservation Authority's predecessor did not take many aggressive steps to register, establish institutional capacity, mobilize resources, re-examine wildlife conservation approaches and objectives, or formulate policy. As a result, the Ethiopian Wildlife Conservation Authority faces a difficult task in combating these underlying dangers. Indeed, several academic research works (Wale *et al*., 2017) have underlined some of the key challenges to protected areas that must be seriously addressed. Attempts to address and mitigate these threats have been attempted, albeit with mixed results. Even in the years ahead, the current approach of using the same tactics across the existing protected area network to alleviate threats to wildlife and associated habitats or ecosystems will have no significant impact. Human encroachment on prime wildlife repository areas is one of Ethiopia's most serious wildlife conservation concerns. Poverty, a lack of law enforcement, a lack of awareness, a lack of integration and cooperation, a lack of political will, a lack of alternative livelihoods, and a lack of an integrated land use system exacerbate these issues. Illegal settlement, agricultural expansion, overgrazing, illegal hunting, deforestation, human-wildlife conflicts, and incompatible land investment have all resulted as a result of this.

As a result of an ongoing trend of encroachment that has resulted in permanent habitat damage and obstruction of wildlife migratory routes and dispersing zones, some of these risks have reached an irreversible level (Vreugdenhil *et al*., 2012). As a result of this situation, the local community has progressively developed a negative attitude toward animal protection and

management, putting their sense of ownership in jeopardy. Almost all of Ethiopia's protected areas are currently vulnerable to human-caused hazards. The enormous demand for land and biological resources is mostly due to the rapid growth of human and animal populations. The local community that surrounds the protected areas relies on them for their livelihood. This has put a tremendous amount of pressure on species and their habitats, as well as posing a serious threat to them. Most wildlife species have been nearly extinct in high-potential areas such as Awash, Rift Valley Lakes, Omo River Delta, Mount Bale Massif, Lake Stefanie, Maji, Dabus valley, and Gambella region, where agriculture, pastoralism, and land investment are the predominant land uses, with significant alteration, fragmentation, and loss of habitats.

Table 2: National Parks of Ethiopia

S.N	Name	Region	Year est.	Area in sq.km
1	Kafeta-Shiraro	Tigray	1999	5000
2	Semien Mountains	Amhara	1959	412
3	Alatish	Amhara	-	-
4	Bahir Dar Blue Nile River Millennium	Amhara	2008	4729
5	Borena-Saynt	Amhara	2008	4325
6	Yangudi-Rassa	Afar	1969	4731
7	Awash	Oromia and Afar	1958	756
8	Dati-Wolel	Oromia	2010	1031
9	Bale Mountains	Oromia	1962	2200
10	Yabello	Oromia	1978	1500
11	Abijata-Shala	Oromia	1963	887
12	Arsi-Mountains	Oromia	2012	-
13	Geralle	Somali	1998	3558
14	Gambella	Gambella	1966	4650
15	Nechsar	SNNPR	1966	514
16	Omo	SNNPR	1959	3566
17	Mago	SNNPR	1974	1947
18	Maze	SNNPR	1997	202
19	Gibe Sheleko	SNNPR	2001	248
20	Loka Abaya	SNNPR	2001	500
21	Chabra Churchura	SNNPR	1997	1190

Source: Ethiopian Protected Areas (Young J, 2012)

3. Summary

In conclusion, Ethiopia is one of the few countries in the world with a distinct and distinctive fauna with a high level of endemicity. The primary goal of wildlife conservation is to protect animals while also preserving nature and natural habitats for humans and wildlife. Wildlife, as a component of the world's ecosystems, contributes to the balance and stability of natural processes. Protecting wildlife in their natural habitat can be accomplished by creating protected areas such as national parks and wildlife sanctuaries. Endangered and vulnerable species can be kept in captivity and reproduced to expand their population in places like zoos. Wildlife conservation strives to keep wildlife populations healthy, keep animal populations

in harmony with their ecosystems, track current habitat conditions and breeding numbers, and prevent species extinction. Due to the harmful effects of human activities, wildlife conservation has become a more significant discipline. Wildlife discussion raises awareness of the significance of wildlife in terms of aesthetic, scientific, and ecological values.

Ethiopia's wildlife tourist industry is largely reliant on protected areas (national parks and sanctuaries). The country is home to a diverse range of animals, primarily huge mammals, which draw a large number of tourists both locally and worldwide. National parks are regions of land that have been set aside to protect native flora and animals, as well as their habitats, natural beauty, historic heritage, and indigenous cultures. Illegal human settlement, agricultural expansion, illegal hunting and fishing, fuel wood collection, forest logging, mining, infrastructure construction, overgrazing, human-wildlife conflict, human-caused fire, and the introduction of invasive alien species are all recognized as major wildlife threats in Ethiopia. This is linked to rising natural resource demands due to rapid human population increase.

Based on the review results, the following recommendations and suggestions for the sustainable use of wildlife, the reduction of threats, and the coexistence of wildlife and local people were made: raising awareness among various sectors and local communities should continue and be strengthened, community-based conservation approaches should be strengthened, and the implementation of local and national conservation regulations should be maintained. Furthermore, higher education institutions should construct a conservation education center with governmental and nongovernmental conservation officials to help boost community knowledge and reduce wildlife conservation issues in the Ethiopian forest.

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