

Protecting Our Endangered Species for Sustainability

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Abstract

This paper critically examines the idea of protecting our endangered species. It defines endangered species and highlights some of the factors threatening their existence. The paper further discusses the efficacy of the steps taken at the global, regional, and national levels towards protecting endangered species. The paper suggests measures towards protecting our endangered species for sustainability.

1.0 Introduction

The concept of sustainability entails creating and maintaining the conditions under which humanity and nature can exist in productive harmony to support present and future generations¹. This is envisaged in the ideal of Sustainable Development which seeks to promote development that meets the needs of the present without compromising the ability of future generations to meet their own needs². The ideal of Sustainable Development aims to achieve sustainability by promoting environmental protection, economic development and social progress³.

The United Nation's *2030 Agenda for Sustainable Development* represents the global vision for sustainability⁴. It sets out a shared blue print for peace and prosperity for people and

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¹ United States Environmental Protection Agency., 'What is Sustainability?' Available at <https://www.epa.gov/sustainability/learn-about-sustainability> (Accessed on 11/05/2024)

² World Commission on Environment and Development., 'Our Common Future.' Oxford, (Oxford University Press, 1987)

³ Fitzmaurice. M., 'The Principle of Sustainable Development in International Development Law.' International Sustainable Development Law., Vol 1

⁴ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Available at

the planet in the quest towards the ideal of Sustainable Development⁵. The agenda envisions attainment of the ideal of Sustainable Development through 17 Sustainable Development Goals (SDGs) which seek to strike a balance between social, economic and environmental facets of sustainability⁶.

The need for sustainability has become pertinent in light of problems facing the planet including climate change, pollution, and loss of biodiversity together with issues of poverty, increasing disparity between societies and the tensions brought by social inequalities⁷. The United Nations Environment Programme notes that environmental problems facing the planet including the triple planetary crisis of climate change, biodiversity loss, and pollution have heightened the importance of forging a new relationship between people and the planet towards achieving sustainability⁸. Establishing harmony between humanity and nature is therefore a key agenda in achieving sustainability⁹. One way through which this goal can be realized is protecting our endangered species¹⁰. It has been noted that protecting endangered species is crucial for the preservation of biodiversity and the maintenance of healthy ecosystems¹¹.

<https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf> (Accessed on 11/05/2024)

⁵ Ibid

⁶ Ibid

⁷ Giovannoni. E., & Fabietti. G., 'What Is Sustainability? A Review of the Concept and Its Applications.' In: Busco, C., Frigo, M., Riccaboni, A., Quattrone, P. (eds) Integrated Reporting. Springer, Cham. Available at https://doi.org/10.1007/978-3-319-02168-3_2 (Accessed on 11/05/2024)

⁸ United Nations Environment Programme., 'The Triple Planetary Crisis: Forging a New Relationship Between People and the Earth' Available at <https://www.unep.org/news-andstories/speech/tripleplanetary-crisis-forging-new-relationship-between-people-and-earth> (Accessed on 11/05/2024)

⁹ Ibid

¹⁰ DGB Group., 'Why Should Endangered Species be Protected?' Available at <https://www.green.earth/blog/why-should-endangered-species-be-protected#:~:text=Protecting%20endangered%20species%20is%20crucial,valuable%20resources%20for%20human%20populations> (Accessed on 11/05/2024)

¹¹ Ibid

This paper critically examines the idea of protecting our endangered species. It defines endangered species and highlights some of the factors threatening their existence. The paper further discusses the efficacy of the steps taken at the global, regional, and national levels towards protecting endangered species. The paper suggests measures towards protecting our endangered species for sustainability.

2.0 Protecting Endangered Species: Promises and Challenges

An endangered species is an animal or plant that is considered to be at risk of extinction¹². Endangered species also refers to those plants and animals that have become so rare they are in danger of becoming extinct¹³. According to the International Union for Conservation of Nature (IUCN), more than 44,000 species are threatened with extinction¹⁴. It has been noted that human activities such as habitat destruction, over-exploitation of natural resources, and pollution have led to the decline of many species¹⁵. As the human population continues to grow and urbanise, natural habitats are being destroyed and fragmented¹⁶. This results in the loss of food, shelter, and breeding sites for many species resulting in their decline¹⁷. Endangered species are therefore plant or animal species at risk of becoming extinct due to various factors such as habitat loss, changing environmental conditions, poaching, and pollution¹⁸.

¹² National Wildlife Federation., 'Endangered Species' Available at <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Understanding-Conservation/Endangered-Species> (Accessed on 13/05/2024)

¹³ United States Environmental Protection Agency., 'What are Endangered and Threatened Species?' Available at <https://www.epa.gov/endangered-species/learn-more-about-threatened-and-endangered-species> (Accessed on 13/05/2024)

¹⁴ International Union for Conservation of Nature., 'The IUCN Red List of threatened Species' Available at <https://www.iucnredlist.org/> (Accessed on 13/05/2024)

¹⁵ DGB Group., 'Why Should Endangered Species be Protected?' Op Cit

¹⁶ Ibid

¹⁷ Ibid

¹⁸ DGB Group., 'The Importance of Saving Endangered Species for a Sustainable Future' Available at <https://www.green.earth/endangered-species> (Accessed on 13/05/2024)

According to the United Nations Environment Programme, the planet is dealing with unprecedented threats to wildlife and biodiversity¹⁹. It points out that the loss of habitat from farming, mining and new urban developments has dramatically decreased the natural space for wildlife²⁰. In addition, UNEP notes that human demand for wildlife products which generates as much as US\$23 billion annually has resulted in many wildlife species being at risk of extinction²¹. According to UNEP, an estimated one million plant and animal species are threatened with extinction²².

Protecting our endangered species is vital in fostering sustainability. UNEP correctly notes that biological diversity is the core of healthy and productive ecosystems and the benefits that humans gain from a thriving natural environment are vast²³. Protecting endangered species is vital in maintaining biodiversity²⁴. The loss of biodiversity can have far-reaching consequences for both the environment and human populations²⁵. It has been noted that some endangered species are the source of vital resources including food and medicine²⁶. The extinction of such species can therefore result of loss of vital resources²⁷.

Further, protecting endangered species is vital since they play a significant role in maintaining ecosystem balance and diversity²⁸. For instance, some endangered species help with pollination and seed dispersal, while others regulate the population of other

¹⁹ United Nations Environment Programme., 'Three ways the United Nations Environment Programme works to address illegal trade in wildlife' Available at [https://www.unep.org/news-and-stories/story/three-ways-united-nations-environment-programme-works-address-illegal-trade#:~:text=The%20United%20Nations%20Environment%20Programme%20\(UNEP\)%20hosts%20the%20Convention%20on,of%20plants%20to%20prevent%20overexploitation.](https://www.unep.org/news-and-stories/story/three-ways-united-nations-environment-programme-works-address-illegal-trade#:~:text=The%20United%20Nations%20Environment%20Programme%20(UNEP)%20hosts%20the%20Convention%20on,of%20plants%20to%20prevent%20overexploitation.) (Accessed on 13/05/2024)

²⁰ Ibid

²¹ Ibid

²² Ibid

²³ Ibid

²⁴ DGB Group., 'Why Should Endangered Species be Protected?' Op Cit

²⁵ Ibid

²⁶ Ibid

²⁷ Ibid

²⁸ DGB Group., 'The Importance of Saving Endangered Species for a Sustainable Future' Op Cit

organisms in the food chain²⁹. Endangered species therefore provide essential ecosystem services such as pollination, seed dispersal, and regulating the population of other organisms in the food chain³⁰. In addition, endangered species also have important medicinal, cultural, and aesthetic values³¹.

It has been argued that the conservation of endangered species is not just a matter of ethical responsibility, but it is also a fundamental necessity for the health of our planet³². Preserving endangered species safeguards the intricate balance of life on the planet therefore ensuring a healthier and more secure future for ecosystems and people³³. It has been noted that when populations decline, this signifies underlying issues such as habitat destruction, pollution, or climate change, which, if unaddressed, can threaten the stability of the entire ecosystem and many other species³⁴. Protecting endangered species is therefore necessary for sustainability.

The need to protect endangered species is recognized at the global, regional, and national levels. At the global level, SDG 15 under the 2030 Agenda for Sustainable Development urges states to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss³⁵. In order to protect endangered species, SDG 15 sets out several targets which include the need for states to take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity, and protect and prevent the extinction of threatened species³⁶. It also requires states to take

²⁹ Ibid

³⁰ Ibid

³¹ Ibid

³² International Fund for Animal Welfare., 'Why Should we Protect Endangered Animals?' Available at <https://www.ifaw.org/international/journal/why-should-we-protect-endangered-animals> (Accessed on 13/04/2024)

³³ Ibid

³⁴ Ibid

³⁵ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Op Cit

³⁶ Ibid, SDG 15.5

urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products³⁷. Achieving these targets is key in protecting our endangered species for sustainability.

In addition, the IUCN maintains a *Red List of Threatened Species*³⁸. IUCN notes that the Red List has evolved to become the world's most comprehensive information source on the global conservation status of animal, fungi and plant species³⁹. The IUCN Red List has been identified as a critical indicator of the health of the world's biodiversity⁴⁰. It is a powerful tool to inform and catalyze action for biodiversity conservation and policy change, critical to protecting the natural resources necessary for survival of life on the planet⁴¹. The IUCN Red List provides information about range, population size, habitat and ecology, use and/or trade, threats, and actions that are necessary to inform effective conservation decisions⁴². It has been noted that the assessments published in the IUCN Red List are used by governments, nongovernmental organizations (NGOs), and multilateral environmental agreements⁴³. The assessments under the IUCN Red List drive conservation action and funding⁴⁴. In addition, it has been noted that the way a species is assessed under the IUCN Red List can also determine whether such species deserve protection under two international treaties aimed at species conservation: the *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)* and the *Convention on the Conservation of Migratory Species of Wild Animals*⁴⁵.

³⁷ Ibid, SDG 15.7

³⁸ International Union for Conservation of Nature., 'The IUCN Red List of Threatened Species' Available at <https://www.iucnredlist.org/> (Accessed on 13/04/2024)

³⁹ Ibid

⁴⁰ Ibid

⁴¹ Ibid

⁴² Ibid

⁴³ International Institute for Sustainable Development., 'Protecting Endangered Species' Available at https://www.iisd.org/system/files/2022-02/still-one-earth-endangered-species_0.pdf (Accessed on 13/05/2024)

⁴⁴ Ibid

⁴⁵ Ibid

CITES regulates international trade in roughly 5,800 species of animals and 35,000 species of plants to prevent overexploitation⁴⁶. It recognizes that wild fauna and flora are of fundamental value from aesthetic, scientific, cultural, recreational and economic points of view hence the need for their effective conservation⁴⁷. Appendix I of CITES includes all species threatened with extinction which are or may be affected by trade⁴⁸. According to CITES, trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances⁴⁹. Appendix II of CITES includes all species which although not necessarily threatened with extinction at the moment may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival⁵⁰. CITES requires states to take appropriate measures to regulate trade in endangered species of wild fauna and flora including penalizing trade or possession of such species, and providing for the confiscation or return to the state of export of such species⁵¹. CITES is therefore an important legal instrument aimed at protecting endangered species from the threats of international trade. CITES guides nations across the world on how to protect threatened species by regulating and monitoring their trade⁵². The Convention establishes a framework for countries to cooperate with each other to ensure that plant and animal species are not depleted by international demand⁵³. It has been noted that without CITES, wildlife being imported and exported across borders would be subjected to inconsistent protections⁵⁴. It is therefore necessary to effectively implement CITES in order to ensure effective protection of endangered species.

⁴⁶ United Nations Environment Programme., 'Three ways the United Nations Environment Programme works to address illegal trade in wildlife' Op Cit

⁴⁷ Ibid

⁴⁸ Ibid

⁴⁹ Ibid

⁵⁰ Ibid

⁵¹ Ibid

⁵² International Fund for Animal Welfare., 'What is CITES?' Available at <https://www.ifaw.org/international/journal/what-cites> (Accessed on 13/05/2024)

⁵³ Ibid

⁵⁴ Ibid

The *Convention on the Conservation of Migratory Species of Wild Animals*⁵⁵ acknowledges the need for states to take action to avoid any migratory species becoming endangered. The Convention requires states to: conserve and, where feasible and appropriate, restore those habitats of the species which are of importance in removing the species from danger of extinction⁵⁶; prevent, remove, compensate for or minimize, as appropriate, the adverse effects of activities or obstacles that seriously impede or prevent the migration of the species⁵⁷; to the extent feasible and appropriate, to prevent, reduce or control factors that are endangering or are likely to further endanger the species, including strictly controlling the introduction of, or controlling or eliminating, already introduced exotic species⁵⁸. This Convention is vital since it recognizes that states must be the protectors of migratory species that live within or pass through their national jurisdictions and aims to conserve terrestrial, marine, and avian migratory species throughout their ranges⁵⁹. Implementing this Convention is key in protecting migratory species of wild animals from danger of extinction.

At a regional level, the *African Convention on the Conservation of Nature and Natural Resources*⁶⁰ sets out the need to protect threatened species on the continent. The Convention defines threatened species to include critically endangered, endangered, and vulnerable species⁶¹. According to the Convention, a species is critically endangered when the best available evidence indicates that it is considered to be facing an extremely

⁵⁵ Convention on the Conservation of Migratory Species of Wild Animals., Available at https://www.cms.int/sites/default/files/instrument/CMS-text.en_.PDF (Accessed on 13/05/2024)

⁵⁶ Ibid, article III (4)

⁵⁷ Ibid

⁵⁸ Ibid

⁵⁹ United Nations Environment Programme., 'Fourteenth Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS COP 14)' Available at <https://www.unep.org/events/conference/fourteenth-meeting-conference-parties-convention-conservation-migratory-species> (Accessed on 13/05/2024)

⁶⁰ African Convention on the Conservation of Nature and Natural Resources., Available at https://au.int/sites/default/files/treaties/41550-treaty-Charter_ConservationNature_NaturalResources.pdf (Accessed on 13/05/2024)

⁶¹ Ibid, Annex1

high risk of extinction in the wild⁶². It further states that a species is endangered when the available evidence indicates that it is considered to be facing a very high risk of extinction in the wild⁶³. In addition, the Convention notes that a species is vulnerable when the best available evidence indicates that it is considered to be facing a high risk of extinction in the wild⁶⁴. The Convention requires states to establish and implement policies for the conservation and sustainable use of such resources with particular attention being paid to socially, economically and ecologically valuable species, which are threatened⁶⁵. In addition, it requires African states to identify species that are threatened or may become so, and provide them accordingly with appropriate protection⁶⁶. In order to achieve this goal, the Convention requires states to identify the factors that are causing the depletion of animal and plant species which are threatened or which may become so, with a view to their elimination, and to accord a special protection to such species, whether terrestrial, freshwater or marine, and to the habitat necessary for their survival⁶⁷. It has been noted that several species in Africa are facing the threat of extinction including the African elephant, the African black rhino, and the Eastern and Western gorilla⁶⁸. It is therefore necessary to implement the *African Convention on the Conservation of Nature and Natural Resources* in order to protect endangered species in Africa.

At a national level, the *Wildlife Conservation and Management Act of Kenya*⁶⁹ requires the state to ensure effective protection and management of endangered and threatened species, ecosystems, and habitats⁷⁰. The Sixth Schedule of the Act identifies critically

⁶² Ibid

⁶³ Ibid

⁶⁴ Ibid

⁶⁵ Ibid

⁶⁶ Ibid

⁶⁷ Ibid, article X

⁶⁸ International Fund for Animal Welfare., '20 of the Most Endangered Animals and Wildlife in Africa' Available at <https://www.ifaw.org/international/journal/20-most-endangered-animals-wildlife-africa> (Accessed on 13/05/2024)

⁶⁹ Wildlife Conservation and Management Act of Kenya., No. 47 of 2013., Government Printer, Nairobi

⁷⁰ Ibid

endangered, vulnerable, nearly threatened and protected species in Kenya⁷¹. According to the Act, the critically endangered species in Kenya include the black rhinoceros, the eastern red colobus, the roan antelope, and the sable antelope⁷². Further, it identifies endangered species to include the white rhino, the African wild dog, the African elephant, the African lion, and the leopard⁷³. The Act makes it an offence to kill, injure, torture or molest a critically endangered, or endangered species in Kenya⁷⁴. A person who commits such an offence shall be liable upon conviction to a term of imprisonment of not less than five years⁷⁵. Protection of endangered species is therefore a key agenda in Kenya as set out under the Wildlife Conservation and Management Act of Kenya.

From the foregoing, it is evident that protecting endangered species is a major concern at the global, regional, and national levels. These species serve as the bedrock of ecosystems, contributing to the conditions necessary for life, both individually and collectively⁷⁶. For example, pollinators like bees and butterflies are vital for the reproduction of many plants, including essential food crops⁷⁷. Therefore decline in their populations can lead to reduced crop yields and even crop failures thereby threatening sustainability of both humanity and nature⁷⁸. Similarly predators such as wolves and big cats help maintain the balance of other species within their ecosystems⁷⁹. In addition, it has been noted that some of the endangered wildlife species, throughout their interaction with the environment, are the missing link between biodiversity and climate⁸⁰. These species play a crucial role in controlling the planet's carbon cycle across a variety of ecosystems through foraging, depositing nutrients and organic carbon, dispersing seeds among other functions⁸¹. Endangered species with high potentials for carbon capture and storage

⁷¹ Ibid

⁷² Ibid

⁷³ Ibid

⁷⁴ Ibid, article 92 (1)

⁷⁵ Ibid

⁷⁶ Protecting the Endangered Species from Extinction., Available at <https://www.linkedin.com/pulse/protecting-endangered-species-from-extinction-anumeenacare/> (Accessed on 13/05/2024)

⁷⁷ Ibid

⁷⁸ Ibid

⁷⁹ Ibid

⁸⁰ Cross. D., 'Rewilding Endangered Species can Help us Mitigate Climate Change' Available at <https://www.sustainability-times.com/environmental-protection/rewilding-endangered-species-can-help-us-mitigate-climate-change/> (Accessed on 13/05/2024)

⁸¹ Ibid

include the African buffalo, white rhino, puma, dingo, primates, hornbills, fruit bats, seals, sea turtles⁸².

3.0 Conclusion

Protecting endangered species is key for sustainability since biological diversity is the core of healthy and productive ecosystems⁸³. However, factors such as habitat degradation and destruction, poaching and illegal trade in wild fauna and flora, and pollution are resulting in the unprecedented loss of species⁸⁴. In addition, human activities are resulting in the destruction of nature for housing, agriculture, industry, leaving no space for biodiversity⁸⁵. Further, it has been noted that land use changes, resource exploitation, climate change, and pollution contribute to the decline of global biodiversity⁸⁶. It is necessary to address these challenges in order to protect our endangered species. Among the key approaches towards this end include habitat restoration⁸⁷. This entails restoring degraded ecosystems to their natural state⁸⁸. This can be achieved by restoring forests, wetlands, and other ecosystems that have been destroyed by human activities⁸⁹. Habitat restoration can help endangered species by providing them with the food, shelter, and breeding sites they need for survival⁹⁰. It is also vital to raise awareness, enforce laws and enlist the support of local communities to stop the illegal trade in wildlife⁹¹. It is therefore necessary for states to strengthen their environmental governance to meet CITES requirements to combat illegal trade in wildlife⁹².

⁸² Ibid

⁸³ United Nations Environment Programme., 'Three ways the United Nations Environment Programme works to address illegal trade in wildlife' Op Cit

⁸⁴ Ibid

⁸⁵ Protecting the Endangered Species from Extinction., Op Cit

⁸⁶ Ibid

⁸⁷ DGB Group., 'Why Should Endangered Species be Protected?' Op Cit

⁸⁸ Ibid

⁸⁹ Ibid

⁹⁰ Ibid

⁹¹ United Nations Environment Programme., 'Three ways the United Nations Environment Programme works to address illegal trade in wildlife' Op Cit

⁹² Ibid

Protecting endangered species also requires negative practices that threaten the existence of these species to be combated⁹³. These activities include poaching, pollution, and the introduction of invasive species to ecosystems⁹⁴. In addition, it has been noted that species conservation efforts should expand to include many more species that are lesser known and serve important ecosystem services⁹⁵. It is also vital to ensure that conservation efforts to create incentives for local communities to conserve endangered species⁹⁶. Protecting our endangered species is therefore an important agenda for both humanity and nature. We must therefore enhance efforts towards protecting our endangered species at the global, national, and regional levels for sustainability.

⁹³ DGB Group., 'The Importance of Saving Endangered Species for a Sustainable Future' Op Cit

⁹⁴ Ibid

⁹⁵ International Institute for Sustainable Development., 'Protecting Endangered Species' Op Cit

⁹⁶ Ibid

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