

Wild Life Conservation in India

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Definition

Wildlife conservation is an activity in which humans make conscious efforts to protect plants and other animal species and their habitats. Wildlife conservation is very important because wildlife and wilderness play an important role in maintaining the ecological balance and contribute to human quality of life.

Introduction

India with its wide array of ecosystems and habitats is a mega-diverse country of the world. It is situated at the tri-junction of Afro-tropical, Indo-Malayan and Paleo-Arctic realm. India has only 2.4 % of the world geographical area, but harbours nearly 8 % of total floral and faunal species of the world. It is an acknowledged centre of crop diversity and crop wild. India's unique topographical features endow it with a diversity of terrain and terrestrial and aquatic ecosystems that harbour rich biodiversity. India has a network of 868 Protected Areas including 104 National Parks, 550 Wildlife Sanctuaries, 87 Conservation Reserves and 127 Community Reserves covering a total of 1,65,088 sq.km. of geographical area of the country which is approximately 5.02%. The Indian government has established 18 biosphere reserves in India, which protect larger areas of natural habitat than a typical national park or animal sanctuary, and often include one or more national parks or preserves, along with buffer zones that are open to some economic uses.

Wildlife Conservation and Its Problems & Threats

Wildlife conservation is referred to as the process by which the animal and plant species are protected in their natural habitats. The main aim of wildlife conservation is to ensure protection of the wildlife and preservation of the nature and natural habitats for humans as well as wildlife. Numerous governmental and non-governmental organizations have been established in support of this endeavour with the express purpose of protecting and conserving animals.



Worldwide, human actions for their own needs and benefits have had a significant impact on animals. Many wild creatures and plants have gone extinct as a result, and biodiversity has decreased. It has been noted that over the last 2,000 years, a sizable number of animal and bird species have gone extinct. Climate change was a contributing factor in some cases, while human activity for the production of goods like food, clothes, housing, and medicine was a factor in other cases. It is also expected that many more species of wildlife will become extinct very soon if they are not protected by proper means of conservation and by enacting effective legislations. Hence, the international organizations and almost all the nations across the world have come together to protect the wildlife and the environment with the help of legislations, Acts, creating national parks, biosphere reserves, wildlife sanctuaries etc. and implementing these legislations and Acts strictly in their nations and regions.

The wildlife is facing many threats due to the human encroachment and their activities as well as few natural factors which can be enumerated below:

- I. **Habitat loss** by destruction, fragmentation and degradation: Habitat destruction and fragmentation can take place by human activities such as felling of trees, dredging rivers, constructing dams, filling wetlands and mowing fields, use of lands for agriculture, construction of houses and roads etc. Habitat degradation can take place because of the increasing pollution level, invasion of new species and changing ecosystems etc.
- II. **Illegal Trading, Hunting and poaching of endangered species:** Illegal hunting and poaching has posed a major threat to wildlife which is further fuelled by the lack of proper management and use of resources by the forest officials to curb the menace and save the wildlife.
- III. **Climate change:** Global warming and climate change has also played a major role in posing threat to the wildlife. This is also again due to human induced activities which is done by the burning of fossil fuels etc. which resulted in the changing of the climate globally.
- IV. **Over exploitation of resources:** Exploitation and over exploitation of resources for food and other purposes has resulted in posing a threat to the wildlife, especially to the endangered species. The over use of the wild animals and plants for food, medicines, clothing etc. has badly affected the wildlife populations and thus has become a threat to their existence.
- V. **Pollution:** The ever-increasing pollution level due to human activities and industrial operations has resulted in the release of harmful and toxic pollutants in the air, water and land. Hence, it has affected the wildlife in an adverse manner and ultimately posed a threat to become extinct.



Possible Solutions In Wildlife Conservation And Implementation Of Laws

- All the problems pertaining to wildlife protection and conservation needs to be addressed strictly adhering to the law and finding some alternative solutions too so that the wildlife could be protected and conserved.
- To stop the criminal and illegal activities of exploitation of wildlife resources in India, some stronger measures are required to be introduced. These measures could be in the manner of conducting awareness programmes among the public and the officials concerned with wildlife protection and the law enforcement personnel.
- Public and Official Awareness: To achieve the goal of preserving and safeguarding wildlife, it is necessary to raise awareness among forest officials and other government employees assigned to protected areas and reserves. Training and research on wildlife conservation strategies and the legal protections available for their preservation should be given to these interested personnel. It is imperative to engage the local population residing in the vicinity of the protected areas by raising their awareness of the significance of wildlife conservation and protection, as well as the applicable legal frameworks that govern it.
- The local people should be apprised of all the available provisions of laws in protecting and conserving the wildlife and the threatened species. They should also be informed about the penalty and punishment in case of violation of any laws and harming the wildlife. This will help in an increased awareness among the local people which will further help in providing support to the forest officials who are working in these protected areas as well as the government officials.
- Acknowledging and incorporating NGOs: Through their actions, Non-Governmental Organizations (NGOs) also contribute significantly to the conservation and protection of wildlife. The Wildlife Protection Society of India is one such group that strives to save the environment by supplying data and assistance to government authorities involved in wildlife conservation and protection. This is done in an effort to combat the illegal wildlife trade and wild animal poaching. These NGOs' participation will be very beneficial to India's efforts to conserve its wildlife riches. Additional strategies for safeguarding and preserving wildlife include breeding both in- and ex-situ, bolstering the resilience of natural reserves, and establishing and overseeing biosphere reserves.
- One of the most crucial methods for preserving wildlife, particularly endangered plant and animal species, is the use of in-situ and ex-situ conservation techniques. Ex-situ conservation is done somewhere outside the native habitat of these species, and in-situ conservation is done in the habitat where these species naturally occur. By reintroducing



and relocating wildlife, these conservation efforts help shield endangered species from the effects of climate change and human activity. These forms of plant and animal conservation involve the captive breeding of species that are endangered due to human activity and climate change and are in danger of going extinct. These protected areas are the sites of these conservation efforts.

- **Increasing Resilience of Nature Reserves:** This strategy includes maintaining natural reserves, creating buffer zones, minimization of human activities such as construction of buildings, roads and transportation activities, minimization of wildlife tourism, minimization of habitat fragmentation, conservation of genetic diversity, protection of biodiversity 'hot spots' thereby preventing extinction and protecting threatened species. To maximize resilience, buffer zones surrounding fragmented landscapes must be created. Buffer zone-protected areas also need repair, with an emphasis on lessening particular effects of climate change. Certain ecosystems may be resilient enough and maintain intact landscapes, but human habitation in these areas requires careful management of land and water use to avoid the ecosystems becoming less resilient. Resilience is further maintained through the management of the flora inside these areas.
- In regions where there is a greater threat to wildlife and endangered species, the government must undertake such strategies. In these buffer zones and natural reserves, wildlife tourism must also be under government control. Because wildlife tourism disrupts nesting sites and has a negative impact on breeding and feeding patterns, the government must keep an eye on these activities and make sure that forest officials and other relevant parties are adhering to the laws and regulations. If this plan is adhered to closely, it will prove to be very helpful in maintaining wildlife in its natural habitat as well as helping to protect and conserve animals.

Wild Life Protected Areas of India

1. **Bio-diversity Hotspots in India** Four out of 35 global biodiversity hotspots of the world are represented in India viz. (i) the Western Ghats as part of the Western Ghats-Sri Lanka global hotspot, (ii) the Nicobar Islands as part of the Sunderland hotspot, (iii) parts of Assam and Meghalaya in the North-eastern region as part of Indo-Burma hotspot, and (iv) the Eastern Himalaya comprising North-eastern Himalayas of India, Bhutan and Nepal. Both the public and private sectors have made efforts to preserve the integrity of these ecosystems. Local communities have been involved in the enumeration of ecosystem services in valuation studies in the Western Ghats by the Economics of Ecosystems and Biodiversity India Initiative (TEEBTII). Studies and projects for the preservation,

restoration, and sustainable use of biodiversity in Himalayan hotspots have been carried out by the National Mission for Sustaining the Himalayan Ecosystems. In hotspot areas, local approaches based on traditional knowledge (TK) for biological resource protection and sustainable use are advocated.

2. **Agro-biodiversity Hotspots in India** the Protection of Plant Varieties and Farmers' Rights Authority (PPVFRA) has identified 22 agro-biodiversity hotspots in India based on the number of species, crop varieties, wild relatives of cultivated crop species, social relevance, ancientness of agriculture, number of species domesticated and the uniqueness of the agro-ecosystem.
3. **Wild Life Protected Areas of India** The National Wildlife Database Cell of Wildlife Institute of India (WII) has been developing a National Wildlife Information System (NWIS) on the Protected Areas of the country. India has a network of 868 Protected Areas including 104 National Parks, 550 Wildlife Sanctuaries, 87 Conservation Reserves and 127 Community Reserves covering a total of 1,65,088 km² of geographical area of the country which is approximately 5.02%.
4. **National Parks** An area, whether within a sanctuary or not, can be notified by the state government to be constituted as a National Park, by reason of its ecological, faunal, floral, geomorphological, or zoological association or importance, needed to for the purpose of protecting & propagating or developing wildlife therein or its environment. No human activity is permitted inside the national park except for the ones permitted by the Chief Wildlife Warden of the state under the conditions given in CHAPTER IV, WPA 1972. There are 104 existing national parks in India covering an area of 40,501 km², which is 1.23% of the geographical area of the country (National Wildlife Database, January 2019).
5. **Biosphere Reserves in India** the programme of Biosphere Reserve was initiated under the 'Man & Biosphere' (MAB) programme by UNESCO in 1971. The purpose of the formation of the biosphere reserve is to conserve in situ all forms of life, along with its support system, in its totality, so that it could serve as a referral system for monitoring and evaluating changes in natural ecosystems. The first biosphere reserve of the world was established in 1979, since then the network of biosphere reserves has increased to 701 in 124 countries across the world. There are 701 biosphere reserves in 124 countries, including 21 Trans boundary sites are on World Network of Biosphere Reserves.

Conclusion

In India, protecting and conserving wildlife is a major undertaking due to the growing worries about illicit trafficking and overuse of animal resources. This goal cannot be accomplished until and until all government agencies, local residents living in and surrounding

protected areas, law enforcement personnel, nonprofit and nongovernmental groups, and the general public collaborate. India is a nation rich in biodiversity due to its rich historical legacy and abundance of priceless, indigenous natural resources. Therefore, everyone has a responsibility to preserve a healthy ecosystem and safeguard this abundant resource.

Despite the country's rigorous legal provisions for the very purpose of wildlife protection and conservation being provided by the laws pertaining to the protection of wildlife and their natural habitat, it is observed that the ground reality is not the same. Animals are still hunted and exchanged for human profit, and wildlife is still abused. Even the use of hazardous materials in industry, daily human activity, building and road construction, and leisure and entertainment activities has a negative impact on the environment, which in turn has an impact on wildlife and their natural habitat. In India, there is still illegal hunting and wildlife trading that does not follow the rules set forth by these laws. So, there is a critical need to raise awareness about wildlife protection.

The need for effective strategies and solutions for the protection of wildlife in India and conservation of wildlife is the need of the hour. The government must work in accordance to the present needs and demands in a situation when these wildlife species are threatened and many of which have come to the verge of extinction. The state governments and central government is required to work together and implement all the relevant laws and conservation strategies in order to protect the wildlife and prevent illegal hunting and trade of these endangered species and wildlife as a whole

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