
WILDLIFE UNDER WATCH: CALL FOR CONSERVATION

Sai Lakshmi S, VIT School of Law, Chennai

Dr. Arun D Raj, Professor, VIT School of Law, Chennai.

ABSTRACT

Wildlife conservation is a crucial global priority, and India, with its rich biodiversity, faces significant challenges in protecting its natural heritage. Despite being home to a vast array of flora and fauna, Indian wildlife is under threat due to poaching, habitat destruction, climate change, pollution, and human-wildlife conflict. Although laws such as the Wildlife Protection Act of 1972 and initiatives like Project Tiger and Project Elephant have made considerable progress, enforcement gaps, resource limitations, and competing economic interests continue to hinder conservation efforts.

Advancements in technology, including the use of drones, AI-powered surveillance, and GPS tracking, have enhanced conservation strategies, enabling real-time monitoring of wildlife and illegal activities. Additionally, sustainable eco-tourism has emerged as a potential tool for generating funds and promoting awareness while benefiting local communities. Strengthening legal frameworks, increasing public awareness, and integrating indigenous communities in conservation efforts are critical for ensuring long-term ecological balance.

This paper highlights the need for a comprehensive, multi-stakeholder approach to wildlife conservation, emphasizing stricter law enforcement, sustainable development, and community participation. By leveraging modern technology, policy improvements, and grassroots involvement, India can safeguard its biodiversity for future generations.

Keywords: Wildlife conservation; poaching; habitat destruction; technology; community participation; biodiversity protection.

1. INTRODUCTION

As Rachel Carson says, “The real wealth of the Nation lies in the resources of the Earth – soil, water, forests, minerals and wildlife”, India fortunately is beyond blessed to be the home of varied species which thrive on different ecosystems ranging from the enormous Himalayas to the lush green mangrove forests and the harsh Thar desert. This wide-ranging terrain is home to a vast variety of wildlife including the Asiatic lion, Bengal tiger, gharials, swamp deers, Indian bison, one-horned rhino, etc.

It is quite astounding that even though India has only 2% of the world’s surface, it is known to have over 7.5% of the species of animals that the world holds, accounting for the total fauna of 92,037 species. It is also estimated that about two times that number of species remain to be discovered in India alone. Looking at the statistics, it is easy to appreciate why India is considered to be the global hotspot for conservation.

The health of the planet lies in its ecosystems which have a profound economic, social and cultural impact on all its inhabitants. Considering the world’s population to be the stakeholders of wildlife, the benefits are reaped by each of them in accordance with their ways and means. Some benefit by feeding on them, some by economically extracting valuables from them, some by tourism and others by living on them etc.

Keeping in mind the importance of the forest ecosystem, it is no understatement that a single death inside the forest has a domino effect across all spheres of the Earth. As stated by Swardeep S. Hundal in his work titled, ‘Wildlife Conservation Strategies and Management in India: An Overview’, the presence or the absence of an animal or plant in a region is determined by ecological and historical factors. It is to be noted that today, India contains 172 species which translates to 2.9% of the world species that are globally threatened by IUCN¹.

It is saddening to understand that there have been many species that have gone extinct and many more on the verge of extinction. Many reasons can be attributed to the loss of wildlife including climate change, habitat destruction, pollution etc. This calls for the conservation of wildlife, at least to save the rest from the imminent dangers and consequent disappearance.

¹ Swardeep S. Hundal, Wildlife Conservation Strategies and Management in India: An Overview, PUNJAB AGRICULTURAL UNIVERSITY.

This article sheds light on the richness of India's biodiversity and the threats surrounding the same along with the measures taken to protect the treasure troves all while emphasising collaborative action.

2. METHODOLOGY

The paper focuses on understanding the involvement of human beings in the subject of wildlife and how they perceive its conservation. An online research was conducted with 10 questions apart from literature reviews, collecting data from 50 individuals in March 2025. The questions pertained to:

- a. The general perception of wildlife
- b. Awareness of wildlife issues
- c. Knowledge of conservation efforts
- d. Personal involvement

3. LITERATURE REVIEW

Considering the significance of this whole subject, there are many literatures written on the same. Different authors via their studies have elaborated on different sensitising and conservation measures.

Authors Paul R. Krausman and A.J.T. Johnsingh to drive awareness have taken a unique approach by discussing wildlife education in India by training biologists for protected area management and wildlife research.

The key notion behind the same is reconciling short-term human interests with the long-term need to conserve wildlife habitats².

In 'Wildlife Conservation and Forestry: Concerns and Policy Developments in India', the author in detail discusses the objectives and scope of the National Wildlife Action Plan. It highlights how the said Plan was implemented and stresses the collective effort approach by

² Paul R. Krausman & A. J. T. Johnsingh, Conservation and Wildlife Education in India, 18 WILDLIFE SOCIETY BULLETIN (1973-2006), (Autumn, 1990), pp. 342-347.

the Central and State governments. He also talks about the positive result that has been achieved in Project Tiger abiding the same³. The study conducted by Sudha Vasan also draws on the same lines whereby she places her bets on a more inclusive and participatory approach towards wildlife conservation⁴. The same are the results in the study titled ‘Conservation in India: New Direction’ that was published in the year 1995. The paper argues that there needs to be a reconciliation between wildlife conservationists and human rights advocates, as both wildlife and local communities are threatened by elitist state policies and the urban-industrial development process, and that a partnership between local communities and government agencies in conserving habitats, with support from NGOs and researchers, is the best way forward⁵.

Authors M.D. Madhusudan and T.R. Shankar Raman, in their work titled, ‘Conservation as if Biological Diversity Matters: Preservation versus Sustainable Use in India’, have dealt with the sustainable use and preservationist approach for the protection of wildlife with an aim to identify the best one. However, the results of the study highlight the importance of considering both human and biological diversity needs in conservation efforts and the requirement of a nuanced middle approach by combining the strengths between the two⁶.

The major takeaway from the above-mentioned literatures is the integration of the local communities along with joint efforts from all ends and the requirement of a balanced approach between strict preservation and sustainable use.

4. OBJECTIVES OF THE STUDY

- To analyze the legal framework governing wildlife protection and environmental laws in the relevant jurisdiction.
- To evaluate the effectiveness of existing regulations in safeguarding wildlife and biodiversity.

³ S. Shyam Sunder, Wildlife conservation and forestry: concerns and policy developments in India, 74 SPECIAL ISSUE: FORESTRY AND NATURE CONSERVATION, (1995), pp. 35-40.

⁴ Sudha Vasan, Wildlife Conservation: Deconstructing the 'Public', 40 ECONOMIC AND POLITICAL WEEKLY, (Nov. 12-18, 2005), pp. 4805-4807.

⁵ Ashish Kothari et al., Conservation in India: A New Direction, 30 ECONOMIC AND POLITICAL WEEKLY, (Oct. 28, 1995), pp. 2755-2766.

⁶ M.D. Madhusudan & T.R. Shankar Raman, Conservation as if Biological Diversity Matters: Preservation versus Sustainable Use in India, 1 CONSERVATION & SOCIETY, (January-June 2003), pp. 49-59.

- To identify gaps and challenges in the enforcement and implementation of environmental laws.
- To propose recommendations for improving legal protections and policy measures for wildlife conservation.
- To assess the role of stakeholders, including government agencies, NGOs, and communities, in wildlife conservation efforts.

5. DATA ANALYSIS

How important do you think wildlife conservation is?

50 responses

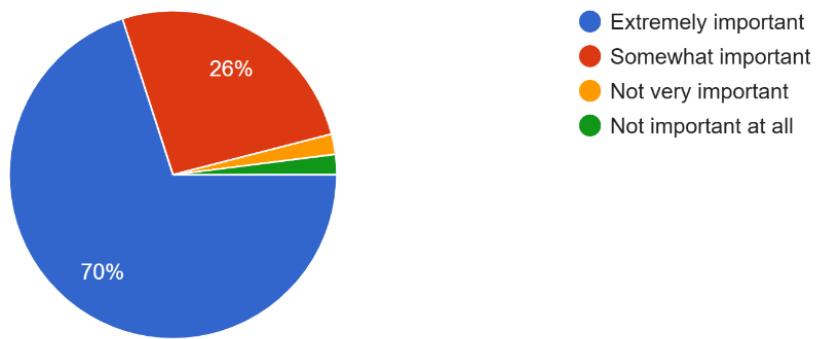


Fig 1

The Figure explains how the individuals grasp the importance of wildlife conservation. The majority of them, have replied it is extremely important to conserve wildlife.

Which of the following do you think is the biggest threat to wildlife?

50 responses

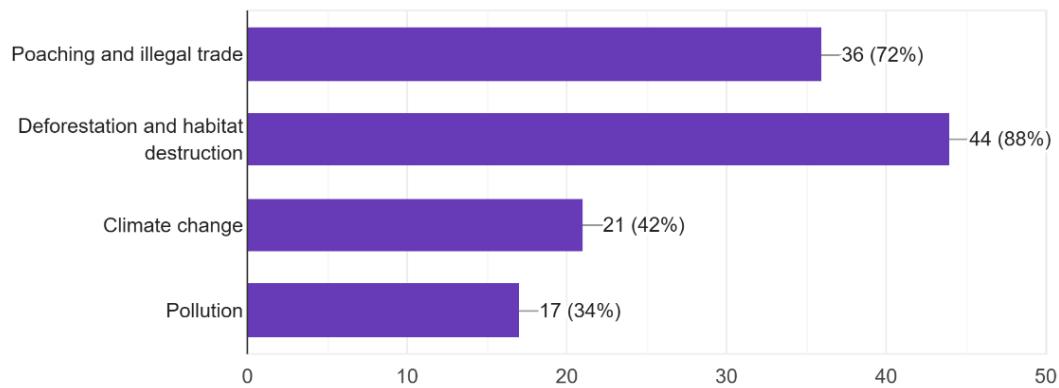


Fig 2

The Figure tends to provide an understanding of what is considered to be the biggest threat to wildlife and it has been observed that deforestation and habitat destruction followed closely by poaching are the major threats.

Which Indian wildlife conservation project have you heard of?

50 responses

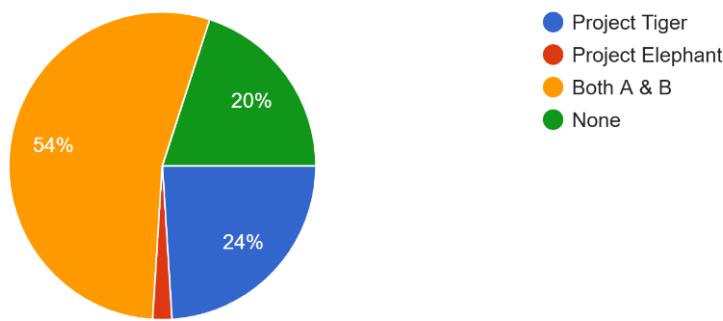


Fig 3

The Figure demonstrates that the majority of them are aware of the major conservation projects in place wherein about 54% of them have at least heard about Project Tiger and Elephant.

Which technological advancement do you think helps the most in wildlife conservation?
50 responses

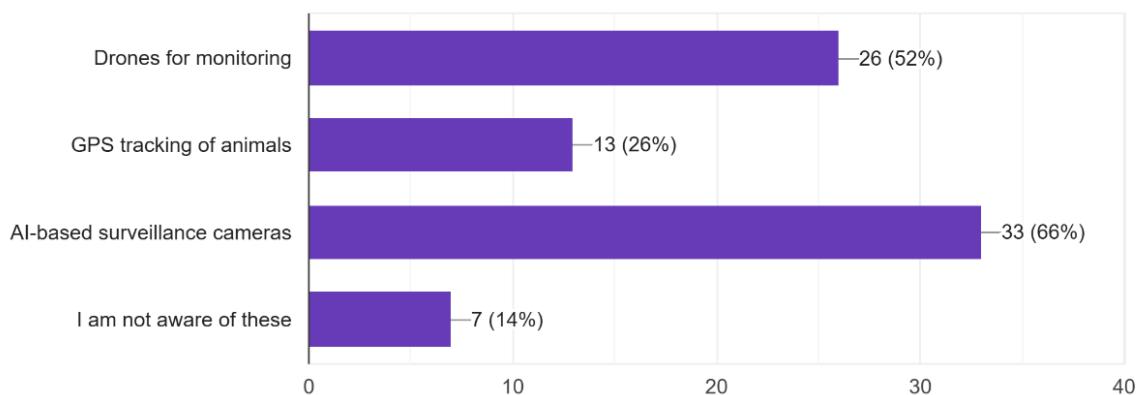


Fig 4

The Figure probes into the technological aspect of conservation. 66% of them feel that AI-based surveillance cameras followed by drones might be used to keep a check on animals. However, a minority of 14% of them have stated that they are unaware of the technological tools.

Would you be willing to pay extra for products that are wildlife-friendly (e.g., sustainably sourced, cruelty-free, eco-certified)?
50 responses

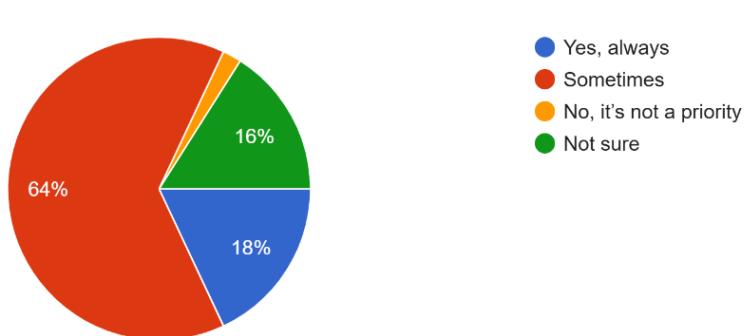


Fig 5

The Figure looks into the aspect of whether or not the individuals are willing to pay extra bucks as their bit to be wildlife friendly. Even though the majority of them have stated that wildlife

conservation is extremely important in Fig 1, it is 18% of them have replied in the affirmative to pay extra while the majority 64% of them are in the middle lane stating sometimes. It also has to be noted that 16% of them have answered unsure.

6. SUMMARY OF FINDINGS

- The majority (around 80%) consider wildlife conservation "Extremely Important" or "Somewhat Important."
- Most respondents see "Maintaining Ecological Balance" as the biggest benefit of wildlife.
- "Poaching and Illegal Trade" and "Deforestation & Habitat Destruction" are the top threats, followed by "Climate Change."
- The majority believe "Encroachment on wildlife habitats" is the biggest reason for human-wildlife conflict.
- Most respondents (about 70%) are "Very Concerned" about species extinction in India.
- Many respondents were aware of both "Project Tiger" and "Project Elephant."
- "Stricter Laws & Punishments" and "Public Awareness Campaigns" were the top choices for efficient conservation methods.
- With regards to technological awareness, "AI-based Surveillance Cameras" and "Drones for Monitoring" were popular choices.
- News & TV and Social Media were the most common sources to keep a tab on wildlife information.
- The majority (60%) were willing to pay extra for sustainable products.
- When individual action for conservation was asked, "Reducing Plastic & Waste" was the most selected action. Many also chose "Supporting Responsible Tourism" and "Reporting Illegal Wildlife Activities." Some respondents selected "All of the Above," indicating a broad awareness of necessary conservation actions.

7. INDIA'S WILDLIFE DIVERSITY

India is one of megadiverse nations with its opulent variety of flora and fauna. It is supported by forests, grasslands, wetlands and marine habitats.

In 'Biodiversity Hotspots and Major Tropical Wilderness Areas: Approaches to Setting Conservation Priorities', a brief account of biodiversity hotspots and the list of the same is given. We find that India is the abode of four of them and those include:

- Western Ghats – A UNESCO World Heritage Site, this region has high endemism, with species like the Malabar civet, Nilgiri tahr, and the lion-tailed macaque.
- Himalayas – Home to rare species such as the red panda, Himalayan monal, and snow leopard.
- Sundarbans – The world's largest mangrove ecosystem, providing habitat for the Bengal tiger, estuarine crocodile, and various fish species.
- Indo-Burma Region – Covers Northeast India, known for its diverse orchids, hornbills, and primates like the Hoolock gibbon⁷.

All of this adds to the legacy of the country however, the same is under threat due to different factors which will be covered in the next section.

8. THREATS TO WILDLIFE

Threats to wildlife range from climate change to loss of habitat and many other factors which indirectly contribute to the same.

8.1 Poaching and Wildlife Trade

In 2021, The Wildlife Protection Society of India documented a large number of tiger deaths. One of the reasons stated for the same is the demand for illicit trade of tiger parts. In 2012, a poaching racket was undiscovered in Corbett National Park wherein firearms, poison and steel

⁷ Russell A. Mittermeier, Biodiversity Hotspots and Major Tropical Wilderness Areas: Approaches to Setting Conservation Priorities, 12 CONSERVATION BIOLOGY, (Jun., 1998), pp. 516-520.

traps were set to kill leopards and tigers to later export their skins and bones to international markets in China and Southeast Asia⁸.

Poaching and the illegal trade of animals continue to be the primary cause of threats to the wildlife. Authors Rosen & Smith, in their study between the periods 1996-2008 have observed that animals are poached for different purposes in which 27% is for skins, pelts and furs followed closely by 25% of elephant hunting solely for their ivory (tusks and products)⁹.

In the case of the State of Karnataka v. K. Krishnappa, the Supreme Court of India pronounced an important ruling against the poaching of elephants in Karnataka's Nagarole and Bandipur National Parks. The judgement emphasised a zero-tolerance policy by imposing strict sentences and heavy penalties¹⁰.

Even after certain governmental initiatives such as the Wildlife Crimes Control Bureau (WCCB) in line with the Convention on International Trade in Endangered Species (CITES), the number of incidents has not significantly gone down, which calls for improved surveillance and stricter penalties.

On a positive note, the Kaziranga National Park which was once the hub for rhino poaching due to its immense value for horns became a zero poaching zone in the year 2022. Coming down from 190 being poached to 0 is a commendable effort taken by the designated and specialised task force formed for this purpose¹¹.

8.2 Habitat Destruction

The basis of habitat destruction is deforestation. This deforestation may be for urbanisation as well as for agriculture.

To satisfy human greed and to expand their territory to other areas, along with a spike in population, there was a surge in urbanisation. This is critical to many developing nations, such

⁸ Pratul Sharma, 34 tigers killed in eight months due to poaching, INDIA TODAY, (Aug 21, 2012 14:50 IST), <https://www.indiatoday.in/india/story/india-tiger-deaths-poaching-ntca-113826-2012-08-20>.

⁹ Gail Emilia Rosen & Katherine F Smith, Summarizing the evidence on the international trade in illegal wildlife, PUBMED (Jun 4, 2010).

¹⁰ State of Karnataka v. K. Krishnappa, AIR 2000 SUPREME COURT 1470.

¹¹ Ratnadip Choudhary, Exclusive: How Assam Flipped The War Against Poachers In Kaziranga, NDTV, (Jan 14, 2023 21:02 pm IST), <https://www.ndtv.com/india-news/exclusive-how-assam-flipped-the-war-against-poachers-in-kaziranga-3692538>.

as India. In the literature published by S. Jha and K.S. Bawa, it has been stated that over 70% of India's forests have been altered due to human activities, resulting in severe loss of habitat that has an inverse relationship with species movement and breeding patterns¹².

In the case of *T.N. Godavarman Thirumulpad v. Union of India*, the Supreme Court of India, interpreted the term 'forest' broadly, ruling that all land meeting the criteria of a forest, irrespective of ownership, would be protected under the Forest Conservation Act, 1980¹³. This led to a nationwide crackdown on illegal deforestation and strengthened legal protection for forest habitats.

In the judgement of *Goa Foundation v. Union of India and Ors.*, held that the Supreme Court banned all illegal mining operations in Goa, citing severe ecological damage to forests and wildlife habitats¹⁴.

According to the World Wide Fund in 2020, it has been stated that agriculture is the leading driver of deforestation globally. The solution to this is adopting sustainable agricultural practices, such as agroforestry and conservation-friendly farming techniques.

8.3 Climate change

Climate change is an imminent threat to the entire ecosystem. Through various studies conducted, it has been identified that climate change poses a serious threat to wildlife as well. An article published by the National Biodiversity Authority in 2021 provides that because of climate change, coral bleaching has occurred in the Gulf of Mannar. Apart from this, sea levels have been raised in Sunderbans and habitats have shrunk for the Himalayan species¹⁵.

Other studies suggest that due to unstable weather conditions and the gradual warming up of the Earth, many species are forced to move out of their indigenous habitat into other territories.

For example, if rates of habitat loss and fragmentation due to human development and global warming continue—combined with deaths from poaching—we could lose Africa's elephants

¹² S. Jha & K.S. Bawa, Population Growth, Human Development, and Deforestation in Biodiversity Hotspots, 20 CONSERVATION BIOLOGY, (Jun 2006), pp. 906-912.

¹³ *T.N. Godavarman Thirumulpad v. Union of India*, WRIT PETITION (CIVIL) NO. 202/1995.

¹⁴ *Goa Foundation v. Union of India and Ors.*, AIRONLINE 2013 SC 623.

¹⁵ K. Venkatraman, Coral Reefs in India, NATIONAL BIODIVERSITY AUTHORITY - http://nbaindia.org/uploaded/docs/ncb_jan_06_12.pdf

in the next 40 years¹⁶. India is not alien to this danger. With coastal erosion in the Sunderbans, the Royal Bengal Tiger is threatened similarly, snow leopards are forced to move to higher altitudes, which significantly hampers the availability of prey. In Centre for Environment Law, WWF v. Union of India & Ors, when the issue was rising temperatures and erratic monsoons impacting tiger populations and their prey, the Supreme Court ruled that no non-forest activities (e.g., mining, deforestation, infrastructure projects) should take place in core areas of tiger reserves¹⁷.

Considering all of the same, the Supreme Court in T.N. Godavarman Thirumulpad v. Union of India, established the mechanism of ‘compensatory afforestation; to counteract climate-driven habitat loss¹⁸.

8.4 Pollution

Pollution is also one of the contributors to the threat to wildlife. Mercury pollution is the worst of all as it causes a chemical buildup that affects the central nervous system of both wildlife and animals. Fish have difficulty schooling and decreased spawning success. Birds lay fewer eggs and have trouble caring for their chicks. Mammals have impaired motor skills that affect their ability to hunt and find food. In addition, some evidence indicates elevated mercury levels can adversely affect species' immune systems. All these effects combine to create a severe threat to wildlife survival.

In the case of Samir Mehta Vs. Union of India and Ors., when the sinking of cargo ship M.V. Rak off the Mumbai coast caused a massive oil spill, harming marine biodiversity and coastal habitats, the National Green Tribunal (NGT) held the shipowners liable under the Polluter Pays Principle and imposed a ₹100 crore fine¹⁹.

8.5 Human-Wildlife Conflict

Due to the loss of habitat, wildlife is coming to the streets and roads often for food which causes clashes between humans and wildlife. It also leads to destruction and loss of lives in many

¹⁶ The Impact Of Climate Change On Our Planet's Animals, IFAW, (Feb 28, 2022) - <https://www.ifaw.org/international/journal/impact-climate-change-animals#:~:text=Habitat%20loss.%20Rising%20temperatures%20affect,other%20animals%20to%20die%20off>.

¹⁷ Centre for Environment Law, WWF v. Union of India & Ors, [2013] 6 S.C.R. 757.

¹⁸ *Supra* Note 13.

¹⁹ Samir Mehta Vs. Union of India and Ors., MANU/GT/0104/2016.

instances.

In the case of Prem Singh Rawat Vs. National Tiger Conservation Authority and Ors, elephants were frequently hit by trains in corridors passing through forests the directed speed restrictions on trains passing through elephant corridors and the installation of warning systems and barriers²⁰.

9. LEGAL AND POLICY FRAMEWORK

The Wildlife (Protection) Act, of 1972 is the cornerstone legislation for the protection of wildlife conservation and management. Numerous studies have been conducted on this subject which has affirmed that though this is a robust piece of legislation, it has its gaps that require attention.

The Act has undergone several amendments in its course to keep the same updated according to the current happenings and changes. Notably, the 2002 amendment has incorporated stricter penalties into the body of the Act making it a serious offence to breach the layout of its boundaries. The National Board for Wildlife also came into existence through this amendment.

However, the Act has to be further amended and discussed in its framework about the compensation mechanisms, preventive methods to create partition between humans and wildlife etc²¹.

Apart from this Act, the protected areas, national parks and wildlife sanctuaries create a haven for wildlife. India has over 100 national parks and over 550 wildlife sanctuaries. Initiatives such as Project Tiger and Project Elephant have garnered huge success in saving tigers and elephants and stabilising their populations through dedicated reserves, anti-poaching measures, and habitat management.

The National Green Tribunal (NGT) and the Supreme Court of India have been instrumental in upholding environmental laws and preventing ecological damage. The NGT has issued landmark rulings on illegal mining, deforestation, and wildlife habitat destruction, while the Supreme Court has strengthened wildlife protection by prohibiting tiger tourism in core areas

²⁰ Prem Singh Rawat Vs. National Tiger Conservation Authority and Ors, MANU/UC/0331/2019.

²¹ G. Vyalakshmi & R. Dhivya, A Critical Study On Wildlife (Protection) Act, 1972 With Special Reference To Compensation, 120 IJPAM, (2018) pp. 2285-2298.

(later modified for regulated tourism) and establishing stricter buffer zone management guidelines.

International partnerships have strengthened conservation measures. Agreements like the Convention on International Trade in Endangered Species (CITES), as well as collaborations with organisations like the International Union for Conservation of Nature (IUCN), have improved wildlife commerce and biodiversity conservation policy. Bilateral initiatives with neighbouring nations, such as Indo-Nepal anti-poaching collaborations and Indo-Bhutan tiger conservation projects, have enhanced cross-border wildlife protection.

Despite the intricate legal framework, there do exist certain challenges. To ensure the long-term survival of India's rich wildlife, inter-agency coordination will need to be strengthened, conservation spending increased, and sustainable development models promoted.

10. ROLE OF TECHNOLOGY IN CONSERVATION OF WILDLIFE

With technology becoming a part of our everyday lives, the advancements have enhanced conservation efforts globally. Many innovations and techniques have come up in this regard which has bolstered monitoring of the species.

Camera traps have transformed wildlife monitoring by giving a non-invasive way to photograph and record movies of animals in their natural settings. These gadgets provide valuable insights into species behaviour, population dynamics, and habitat use, allowing conservationists to make more educated decisions²².

Drones, or unmanned aerial vehicles (UAVs), have emerged as useful tools for surveying huge and inaccessible areas. They allow for real-time animal monitoring, assessment of habitat changes, and identification of illicit activities such as poaching. The integration of AI with these technologies improves data analysis by automating species and pattern identification, enhancing conservation efficiency and accuracy²³.

GPS monitoring systems have proven useful for researching animal movements and behaviours. By putting GPS collars or tags to animals, researchers may collect exact data on

²² José J Lahoz-Monfort & Michael J L Magrath, A Comprehensive Overview of Technologies for Species and Habitat Monitoring and Conservation, 71 BIOSCIENCE, (Oct 2021), pp 1038-1062.

²³ *Ibid.*

migration patterns, territorial ranges, and habitat use. This knowledge is critical for creating effective conservation efforts, particularly for migratory species and those that live in broad landscapes. Tigers are patrolled using M-STripes which is GPS and GIS mechanised system to monitor.

In Assam, the "Haati" smartphone application was created to notify villages of nearby elephant movements, minimising human-elephant confrontations. This tool provides communities with real-time information, which improves coexistence methods²⁴.

Apart from this, the government is promoting and encouraging other developments which would further transform the process.

11. ROLE OF NGOS AND LOCAL COMMUNITIES

Indigenous communities play a crucial role in the protection of wildlife predominantly because of their knowledge and the ability to see from a practical lens. With their help, it is easy to implement the knowledge of traditional practices into modern strategies of conservation.

NGOs such as the World Wide Fund for Nature – India, Wildlife Trust of India, Bombay Natural History Society etc, are organisations that have been established and stayed in existence for quite a long period of time working on anti-poaching measures, habitat restoration and raising awareness.

Out of different revolutionising movements carried by NGOs, the Chipko Movement stands apart primarily because of its enthusiasm and vigour. It was founded in the 1970s in Uttarakhand (then Uttar Pradesh), as a grass-roots environmental movement dedicated to avoiding deforestation. Villagers, notably women, rallied behind activists such as Sunderlal Bahuguna and Gaura Devi to defend trees from being cut down by loggers. This nonviolent demonstration successfully pushed the government to impose a 15-year moratorium on commercial deforestation in the region. This campaign became a symbol of environmental conservation, inspiring many initiatives across the globe²⁵.

²⁴ App to reduce deaths by elephants launched in India, BBC, (11 August 2024), <https://www.bbc.com/news/articles/cy4yp0zy39lo>

²⁵ Soutik Biswas, Sunderlal Bahuguna: The man who taught India to hug trees, BBC, (21 May 2021), <https://www.bbc.com/news/world-asia-india-57171363>.

12. CHALLENGES IN IMPLEMENTATION OF CONSERVATION EFFORTS

Wildlife conservation projects encounter numerous hurdles, including legal enforcement gaps and resource limits. These barriers frequently undermine the efficiency of conservation policies and jeopardise biodiversity protection.

1. Gaps in Law Enforcement

Despite strict animal protection regulations including the animal Protection Act (1972) and the Forest Conservation Act (1980), enforcement is lax due to corruption, a lack of educated people, and insufficient surveillance. Poaching, illegal wildlife trade, and encroachments continue because criminals frequently avoid punishment. Many protected areas are similarly understaffed, which makes it impossible to efficiently monitor extensive forested tracts. The delay in legal proceedings diminishes the deterrent to wildlife offences.

2. Conflicts in Development and Conservation

Balancing economic development with environmental conservation is a significant task. Infrastructure projects such as highways, dams, and mines frequently intrude on ecologically sensitive areas, resulting in habitat damage and fragmentation. For example, in India, initiatives like the Ken-Betwa River Linking Project endanger tiger habitats in the Panna Tiger Reserve. The desire for land and resources causes deforestation, human-wildlife conflicts, and the relocation of indigenous groups, making conservation initiatives problematic.

3. Funding and Resource Limitations

Effective conservation necessitates significant financial investment in habitat restoration, anti-poaching efforts, research, and community participation programs. However, conservation projects frequently face budget cuts and limited donor support. In many situations, protected areas lack sophisticated surveillance technology, skilled personnel, and medical services for injured animals. Additionally, conservation funding is often allocated unequally, with flagship species like tigers receiving more attention than lesser-known endangered species.

4. Political and bureaucratic hurdles

Conservation initiatives are frequently delayed due to political considerations, bureaucratic red

tape, and competing priorities. Governments may prioritise short-term economic benefits over long-term environmental sustainability. Policies such as lowering environmental impact assessment (EIA) standards and granting industrial clearances in wildlife corridors harm conservation efforts. Furthermore, collaboration between several organisations, such as the Forest Department, Wildlife Crime Control Bureau, and local governments, is sometimes lacking, resulting in inefficiencies when implementing conservation measures.

13. CONCLUSION

Wildlife conservation necessitates a comprehensive approach that combines human development and environmental sustainability. Governments must establish and implement more stringent rules, increase protected areas, and match conservation laws with international accords. Increased enforcement through ranger patrols, drone monitoring, and legal action will boost protection efforts.

Schools, outreach initiatives, and awareness campaigns target concerns such as deforestation, animal trafficking, and pollution. Eco-tourism provides a potential answer by raising funding for conservation and benefiting local communities through ethical tourism practices.

Giving local communities financial incentives, alternative livelihoods, and decision-making roles assures long-term commitment to conservation.

By combining these techniques, we may create a future in which wildlife thrives under strict protection.

REFERENCES

<https://knowindia.india.gov.in/profile/fauna.php>

<https://indiabiodiversity.org/page/show/4246006>

https://www.panda.org/discover/our_focus/forests_practice/deforestation_fronts_/

<https://www.nwf.org/Educational-Resources/Wildlife-Guide/Threats-to-Wildlife/Pollution>

https://www.sundarbanvives.in/2024/02/wildlife-ngos-in-india.html#google_vignette

<https://www.jagranjosh.com/general-knowledge/world-wildlife-day-quotes-wishes-1646277469-1>

<https://animalcharityevaluators.org/blog/threats-to-wildlife/>

<https://www.wpsi-india.org/statistics/#:~:text=31%20tigers%20killed%20in%202020,kg%20of%20bones%20per%20tiger.>

<https://www.theearthsafari.com/tour/list-of-national-parks-in-india#:~:text=It%20has%20been%20the%20site,Tiger%20safaris%20and%20scientific%20research.>

<https://www.traffic.org/news/india-and-nepal-sign-accord-to-protect-wildlife-and-tackle-crime/#:~:text=Both%20countries%20will%20also%20co,Sinha%2C%20Head%20of%20TRAFFIC%20India.>

<https://www.brookings.edu/articles/sambandh-blog-conflict-conservation-and-cooperation-across-the-india-bhutan-border/>

<https://changestarted.com/challenges-in-wildlife-conservation/>

<https://www.geojournal.net/uploads/archives/6-1-36-997.pdf>

<https://changestarted.com/challenges-in-wildlife-conservation/>