

A walk-through the Wildlife (Protection) Act, 1972: Journey till now and the way ahead

Introduction

India, with its rich array of ecosystems spanning terrestrial, freshwater, and marine environments, is recognized as one of the world's most significant biodiversity hubs. The presence of four global biodiversity hotspots—the Himalaya, the Western Ghats & Sri Lanka, Indo-Burma, and Sundaland—further emphasizes the nation's ecological significance. Yet, this immense diversity faces growing threats from anthropogenic activities, climate change, and unsustainable development, making it urgent to plan conservation efforts.

Globally, biodiversity is being lost at an alarming rate due to various reasons such as human activities (Bourgoin et al. 2024), land use change (Cabernard et al. 2024) and global warming (Price et al. 2024), despite numerous initiatives to halt this decline. India, however, continues to stand out, boasting the largest populations of charismatic species like the Royal Bengal Tiger (Goodrich et al. 2022) and the Asian Elephant (Williams et al. 2020). These achievements reflect not only modern conservation efforts but also the nation's deep-rooted historical and cultural connection with nature. From the sacred groves of ancient communities to religious reverence for species such as snakes and peacocks and trees like the banyan and neem, India has long practiced forms of conservation rooted in coexistence and reverence for the natural world.

The conservation ethos in India dates back to the 3rd century BCE, when Emperor Ashoka enacted edicts banning hunting and protecting wildlife. However, the colonial period marked a turning point, as large-scale exploitation of forests and wildlife led to the depletion of many species. Post-independence development pressures further exacerbated this crisis, driving some species to the brink of extinction.

The Wildlife (Protection) Act, 1972 (WPA, 1972), was a landmark legislation aimed at reversing this trend. Enacted in the wake of the Stockholm Conference, the Act provided a legal framework for protecting species based on their conservation needs, establishing protected areas, and regulating activities that threaten biodiversity. Over the past half-century, the Act has played a crucial role in the recovery of flagship species like the Royal Bengal Tiger, Asiatic Lion, and Asian Elephant.

However, despite its successes, the Act has several limitations. It struggles to address modern conservation challenges such as habitat destruction, human-wildlife conflicts, and unresolved forest rights. Its lack of adaptive and inclusive mechanisms has made it difficult to respond effectively to the evolving complexities of conservation in India.

This raises a pressing question: Why is wildlife still under threat despite a strong legal framework like the WPA, 1972? Is it a failure of implementation, an inability to adapt to emerging challenges, or inherent gaps in the Act itself?

This article seeks to critically analyse the evolution of conservation efforts in India, from the pre-colonial era to the present. By examining the history of the WPA, 1972, its amendments, successes, failures, and discrepancies, we aim to shed light on the gaps that hinder its effectiveness. Additionally, we will explore the importance of adaptive and inclusive conservation strategies that integrate ecological, social, and legal complexities to address the modern challenges of biodiversity conservation in India.

Conservation through the ages

In this section, we will explore the evolution of nature conservation in India across different

historical periods. Starting with the pre-colonial era, we will examine traditional practices and early governance systems that emphasized environmental stewardship. Moving to the colonial period, we will analyse the impact of British policies on forests and wildlife. The post-colonial era highlights India's efforts to rebuild its conservation framework after independence. Finally, we will look at the current era, focusing on developments after 1972, marked by significant milestones like the Wildlife Protection Act and the growing emphasis on sustainable conservation practices.

Conservation through the ages: Pre-colonial era

In the pre-colonial era, nature conservation in India was rooted in key historical periods. The Arthashastra by Chanakya emphasized resource management, while Ashoka's Mauryan reign introduced policies for protecting animals and forests. The Gupta dynasty culturally revered nature, and the Mughal era contributed through afforestation and biodiversity documentation. These phases highlight how ancient and medieval India understood and practiced conservation, shaping the foundations of environmental stewardship in the region.

As quoted by Sanjay Molur, India has long been considered a land of nature worshippers, with pre-colonial views of nature deeply influenced by religious and cultural beliefs (Roy & Fleischman 2022). The Vedas reflect a profound reverence for nature, and texts like the Mahabharata and Ramayana emphasize wildlife protection, with Rishis warning against deforestation. Cultural traditions linked birth stars to trees, fruits, and animals, and the practice of totemism associated tribes with specific plants or animals, reinforcing the associations between humans and wildlife. While methods of wildlife protection evolved, the core understanding of conservation remained consistent from this period onward.

Kautilya emphasized afforestation, particularly promoting monoculture plantations, with the goal of

enhancing the nation's forest reserves by cultivating valuable tree species (Roy & Fleischman 2022). Elephants, essential for warfare, were safeguarded by the rulers, and their tusks were considered state property. To protect these animals, the Mauryan rulers established dedicated forests (Saravanan 2024).

Ashoka advocated for planting trees along roads and ending the practice of forest burning. In accordance with the 14 rock edicts, he promoted the cultivation of fruit trees and medicinal herbs on wastelands. His reign introduced Abhayaranya, the first concept of sanctuaries and national parks in India, aimed at restoring forests and their resources. Additionally, the adoption of metal tools, such as those made from copper and iron, reduced dependence on forest products, reducing forest exploitation (Roy & Fleischman 2022).

The Gupta dynasty (200–600 BCE) upheld earlier forest governance practices but introduced regulations that significantly transformed forests into agricultural land. Celebrated as the "Golden Age of India," the period encouraged peasantry by converting forests and uncultivated areas into farmland (Roy & Fleischman 2022).

Hunting in India dates back to before the Mughal era, serving as both a prestigious pastime and a critical skill for warfare. Islamic teachings, based on Quranic interpretations, highlighted the forests as divine gifts, without imposing restrictions on their exploitation. Forest-dependent communities were granted certain privileges and responsibilities related to forest resources, although the Mughals showed little interest in forest restoration or protection. During the Mughal era (AD 1526–1761), hunting remained a prominent activity, not only in India but globally. Abul Fazl described hunting as a source of knowledge (Roy & Fleischman 2022).

In pre-colonial times, forests were appreciated for their aesthetic, wildlife, and economic value.



Forest Department officials to regulate poaching. For the British, hunting symbolized their dominance over both nature and the colonized population, with tiger hunts serving as a powerful representation of their authority. Predators such as tigers and leopards were labelled as "vermin" and targeted for extermination, while elephants received special protection due to their

Conservation efforts, deeply influenced by cultural and religious beliefs, focused on afforestation with "valuable species" and garden creation. Decisions on conservation were predominantly made by rulers, traditional experts, or wise individuals (Roy & Fleischman 2022).

Conservation through the ages: Colonial era

In the 19th century, wildlife populations in India declined dramatically due to the construction of railroads and the expansion of British control. Although conservation efforts began during this period, they were primarily motivated by British administrative and commercial interests, rather than genuine ecological concerns. The colonial forestry system sought to exploit forest resources, dismantle regional forest management systems, and alter forest boundaries to serve agronomic and economic purposes. British control over forestry was formally established in 1847 with the creation of the Bombay Forest Conservancy and in 1864 with the establishment of the Imperial Forest Department.

Moreover, British colonial rule in India established significant control over natural resources, particularly timber, through the Forest Act of 1878, which brought over 20% of the region's forests under government jurisdiction. Hunting within these state-controlled forests required licenses that were selectively issued to Europeans and rarely granted to Indians (Sharma & Tripathi 2024). This policy increased social inequalities and empowered

cultural and symbolic importance. This dichotomy reflected colonial ideologies, with predators like tigers and lions often compared to rebellious individuals, reinforcing the narrative of domination and control. The widespread killing of these animals was portrayed as a cultural triumph and a display of colonial power. Also, the East India Company awarded 5–10 rupees for tiger hides and increased rewards to 20–50 rupees for adults and 10–20 rupees for cubs by the 1860s. Between 1875 and 1925, over 80,000 tigers, 150,000 leopards, and 200,000 wolves were killed (Rangarajan 2012). As British authority grew stronger, hunting became increasingly regulated with strict codes, reflecting the imperial grandeur of the time and further deepening the divide between Britons and Indians.

By the 1850s, sport hunting in India had evolved into a grand spectacle, merging Mughal opulence and princely traditions with British customs. These big-game hunts symbolized status, masculinity, power, and wealth. Prominent figures like Viceroys, Governors, and Commissioners actively supported and often took part in these extravagant hunting expeditions, capitalizing on the unique opportunities India provided for such activities.

By 1920, lions were extinct in British India, surviving only in the Princely States of Saurashtra. The situation was equally dire for cheetahs, which were overhunted to the brink of extinction due

to their perceived threat to game species and livestock. Apart from the predators, herbivores like the Nilgiri Tahr, once estimated at 25,000–30,000 in the Palani Hills during British rule, faced severe losses. Historical accounts mention British soldiers consuming tamed Tahr herds during Arthur Wellesley's campaign against Tipu Sultan (Sekar 2004; Sekar & Srivastav 2024). Today, the Nilgiri Tahr is Endangered, with only about 3,100 individuals surviving across 5,790 km² of forests in Tamil Nadu and Kerala (World Wildlife Fund 2015). The 18th and 19th centuries saw extensive wildlife destruction for food, recreation, and commercial purposes, alongside deforestation for infrastructure projects like railways, highways, and dams.

Eugene Malville Van Ingen established a successful taxidermy business in Mysore in 1912, handling around 43,000 tiger skins during its operation (Allum 2015). Taxidermy, which had been thriving in Mysore since 1900, involved preserving hunted animals as treated, stuffed, and mounted displays that decorated palaces, royal residences, military lounges, government offices, and museums (Sekar & Srivastav 2024). The popularity of tiger hunting spurred widespread tiger-shooting advertisements. For instance, a British Indian newspaper in 1904 promoted "Cordite Rifles" as ideal for killing tigers. E.P. Gee, a former hunter turned conservationist, estimated that India had 40,000 tigers at the beginning of the 20th century, but by 1964, the population had plummeted to just 4,000 (Gee 1964; Green 2006). Excessive hunting of deer and boar in the colonial period diminished the food supply for large predators, resulting in the decline of rhinos and wild buffalo population in north Bengal by the 1850s



and a decrease in Nilgai numbers. The reduction of essential prey animals resulting in heightened predation on Indian One-horned Rhinoceros and Wild Buffalo. Furthermore, rhinos and buffaloes also were pursued for their horns and flesh, which hastened their decrease. Colonial policies, such as restricting Santhal tribal hunts, disrupted natural checks on wild animal populations.

Hunting during colonial India involved meticulous preparations, with royal tours often resembling grand festivals. British sportsmen popularized tiger shooting from elephant backs or machans using live bait, supported by large entourages of trackers, beaters, and weapons. In 1926, R.C. Morris's pursuit of rogue elephants in Coimbatore involved a three-shooter team and numerous aides, highlighting the scale of such hunts (Daniel 1998).

Sadul Singh of Bikaner recorded killing nearly 50,000 animals and 46,000 birds over 25 years (Rangarajan 2001). Historian John Mackenzie noted motives for hunting included recreation, trophies, food, and protection of crops and livestock (Mackenzie 1997). By the mid-19th century, forest clearance for plantations intensified wildlife conflicts, with herbivores damaging crops and carnivores attacking livestock. Local hunters (Shikaris) emerged, and hill stations became popular hunting grounds, worsening habitat loss. Amidst all these destructions, legal conservation measures only began in the 1870s (Sekar & Srivastav 2024).

In the 1870s, the British government evaluated local practices across its territories to identify effective



ways to eliminate wildlife considered problematic. This policy shift marked the beginning of state-driven wildlife management, prioritizing control over conservation (Weil 2006).

Initially focused on destruction, British India later introduced Forest Acts to conserve wildlife while retaining control over animals and forest resources (Weil 2006). Colonial officials and naturalists primarily sought to protect wildlife for hunting purposes. By the early 20th century, attitudes towards wildlife shifted, moving from eradicating "undesirable" species to valuing nature and animal life. This change, driven by officer-hunters turned naturalists, sparked a wildlife preservation movement. Conservation efforts emerged through policies, legislation, and advancements in scientific forestry. Early laws like the Indian Forest Act of 1878 and the Arms Act of 1878 aimed to manage wildlife by regulating hunting and reserving forests but often restricted local communities' access in favour of colonial interests. Europeans retained hunting privileges, while locals' rights were curtailed. Species-specific protections began with acts like the Cattle Trespass Act (1871) and the Madras Elephant Preservation Act (1873), later extended nationwide in 1879. The Central Government's Elephant Preservation Act of 1879 prohibited killing or capturing wild elephants, except under specific circumstances, with penalties for violations including fines or imprisonment.

The Nilgiri Fish and Game Preservation Act of 1879 aimed to curb wildlife overexploitation in the Nilgiris, Coimbatore, and Malabar regions (Davidar, 2012). It sought to conserve game species, introduce new ones, and regulate hunting as part of British recreational activities. The Act introduced closed hunting seasons, protected young animals, and restricted hunting near roads, waterholes, or from platforms like machans. Night hunting was prohibited, and small game hunting was limited to two days a week. Penalties were imposed for violations, including failing to track wounded

dangerous animals. The Act also banned egg collection from species such as peafowl, junglefowl, and spurfowl, and employed game wardens and fish watchers to deter poaching (Davidar 2012).

The Madras Forest Act of 1882 emphasized forest classification, tree preservation, fire prevention, and restrictions on cultivation and grazing. It prohibited the removal of forest resources, including animal parts like tusks and skins, from reserved forests. Hunting and fishing were regulated through measures such as banning water poisoning and trap setting. Closed-season hunting restrictions were introduced to safeguard wildlife, along with annual limits on animals like two sambars, one bison, two barking deer, and two antelopes (Sekar 2015). The Act also implemented hunting quotas, licensing requirements, and exclusive shooting zones for elites.

India's first national wildlife protection law, the Wild Birds Protection Act of 1887, limited the possession or sale of certain wild birds during their breeding season but did not ban their hunting. The Act was enforced only in municipal and cantonment areas, leaving other regions unregulated. It introduced the ideas of 'closed areas' and 'closed seasons' for hunting (Sekar 2004; Sekar & Srivastav 2024). However, it proved ineffective in curbing the widespread killing of wildlife throughout British India.

Both the Wild Birds Protection Act of 1887 and earlier legislation focused primarily on regulating hunting, neglecting the critical issue of wildlife trade, which continued to deplete animal populations. To address this gap, the Wild Birds and Animals Protection Act of 1912 was enacted. This Act introduced closed hunting seasons and a licensing system to regulate the hunting of certain species, particularly during breeding periods. It also authorized state governments to establish closed periods to restrict hunting and trade during vulnerable times. Expanding upon the 1887 Act, the

1912 law criminalized the killing or capturing of wild animals and birds. However, species like elephants, tigers, and lions were exempted, as the British administration classified them as vermin and allowed their hunting for trophies. Despite its broader scope, the law failed to tackle the impact of wildlife trade and was largely ineffective in curbing the hunting of these iconic animals.

The Wild Birds and Animals Protection Act of 1912 was amended in 1935 (Act XXVII of 1935) to grant provincial governments the authority to designate sanctuaries for the protection of birds and animals. Within these sanctuary areas, hunting or capturing wildlife was strictly prohibited at all times. The amendment also expanded the schedule to include additional species under protection. However, hunting of species not listed in the schedule remained permissible outside the sanctuaries. This amendment strengthened legal protections for wildlife within sanctuary boundaries and paved the way for the United Provinces National Parks Act of 1935, which facilitated the creation of Hailey National Park (now Corbett National Park), the first national park in British India.

The Indian Forest Act of 1927 aimed to promote environmental conservation by designating certain areas as "reserves," thereby safeguarding forests and wildlife. Similarly, the Bengal Rhinoceros Preservation Act of 1932 sought to protect wild rhinoceroses in the Bengal Presidency by prohibiting their killing, injury, or capture, except in self-defence or with government authorization. This era saw the emergence of notable conservation efforts, building on earlier legislation such as the Wild Birds Protection Act (1887) and the Elephant Preservation Act (1889), which preceded the 1912 Act that introduced stricter measures, including a ban on night tiger hunts (Mandala 2015).

The early 20th century also marked the creation of wildlife reserves like Kaziranga, Corbett National Park, and Banjara Valley, influenced by

conservationists like Jim Corbett. However, the focus remained on regulating hunting rather than addressing the wildlife trade, a significant driver of biodiversity loss (Mandala 2015). During World War II, the Southeast Asian Command's training camp in Mudumalai caused extensive destruction of wildlife (Sekar, 2004; Sekar & Srivastav 2024).

Cultural and religious beliefs also influenced conservation practices. For instance, Salem shepherds avoided killing wolves, attributing spiritual significance to their presence, while the Bishnoi community strictly safeguarded blackbucks and Khejri trees through rigorous local traditions (Rangarajan 2001). Similarly, the Nawab of Junagarh took significant steps to protect Asiatic Lions by limiting habitat destruction and hunting in the Gir region. Despite these efforts, the conservation laws and initiatives of the era achieved only limited success in tackling the widespread issues of species decline and habitat loss.

Prior to India's independence, environmental protection relied on general legal principles like nuisance or negligence under the Indian Penal Code (1860) and the Criminal Procedure Code (1898). While the Indian Penal Code does not directly address wildlife, it defines "animal" under Section 47 and criminalizes acts like maiming or killing animals under Sections 428 and 429, imposing legal penalties for such offenses. Similarly, the Motor Vehicles Act of 1939 was inadequate in curbing the exploitation of natural resources or addressing the environmental damage caused by industrial activities.

Conservation through the ages: Current era

After gaining independence, India made notable progress in wildlife conservation through legislative, executive, and judicial initiatives. In the 1950s, the Rhinoceros Preservation Act and Elephant Preservation Act were enacted to safeguard key species. A significant development occurred in 1952 with the establishment of the Central Board for Wildlife, which fostered discussions on

creating sanctuaries and national parks, marking a coordinated conservation effort. Sri Jayachamaraja Wadiyar, Maharajah of Mysore, chaired the Board and actively shaped its goals and responsibilities (Ramesh 2020).

During its inaugural meeting, the Board renamed itself the Indian Board for Wildlife (IBWL) and, in subsequent sessions, passed resolutions to protect species such as the Snow Leopard, Rhinoceros, and Great Indian Bustard. The IBWL also played a key role in encouraging the Indian government to prioritize the conservation and expansion of the Asiatic Lion population in Gir (Ramesh 2020). However, post 1965, the IBWL stopped convening, leading to a temporary decline in biodiversity conservation discussions within the government.

Institution of the Wildlife Protection Act, 1972

Although wildlife trade generated significant foreign exchange for India and served as an important livelihood source for many, its harmful and rapid impact on the country's wildlife could not be overlooked. In 1968, India officially banned the export of animal fur. In 1969, during the International Union for Conservation of Nature's triennial meeting in New Delhi, then Prime Minister Indira Gandhi remarked, *"We need more foreign exchange but not at the cost of the life and liberty of some of the most beautiful species in the country"*, thereby establishing the nation's wildlife protection objectives (Badola 2023). Following this, the Prime Minister restructured the Indian Board for Wildlife (IBWL) and appointed Dr. Karan Singh as its chairman (Ramesh 2020).

In 1972, India took part in the United Nations Conference on the Human Environment in Stockholm, Sweden, the first global conference to place environmental issues at the forefront of international discussions (United Nations 1973). Building on this momentum, Prime Minister Indira Gandhi championed the enactment of the Wildlife Protection Act, 1972, positioning it as a central legal

framework for wildlife conservation in India. The Act was passed by Parliament during its winter session in 1972, providing significant support to Project Tiger and the nationwide ban on tiger hunting implemented in 1973 (Badola 2023).

Evolution and Rectification of the Wildlife

Protection Act: 1972–2022

The enactment of the Wildlife Protection Act in 1972 marked a significant milestone in India's efforts to conserve its rich biodiversity. However, like any newly introduced legislation, the Act faced several challenges in its implementation, such as addressing emerging conservation needs, evolving ecological threats, and balancing human-wildlife coexistence. To tackle these challenges and ensure the law remained relevant and effective, it became necessary to amend the Act periodically. Over the years, major amendments were introduced in 1982, 1986, 1991, 2006, 2013, and 2022, each addressing specific gaps and strengthening the legal framework to adapt to changing conservation priorities and ground realities. Let us go through the major changes brought in by these amendments and the gaps they tried to fill with.

The Wildlife (Protection) Amendment act 1982, 1986 and 1991

The first amendment to the Act was introduced in 1982, introducing provisions for the scientific translocation and population management of animals, along with changes related to trade licensing.

The next significant amendment to the WPA came in 1986, introducing key provisions for regulating and monitoring wildlife trade under Chapter VA, titled "Prohibition of trade or commerce in trophies, animal articles, etc. derived from certain animals." Furthermore, the manufacture and trade of ivory articles were no longer exempt under the Act. A significant amendment to the WPA was introduced in 1991, bringing several key changes. These included the addition of Chapter IIIA, titled

“Protection of Specified Plants,” and Chapter IVA, titled “Central Zoo Authority and Recognition of Zoos.” This amendment also saw the removal of Section 10 and the abolition of “Game Reserves.”

A common thread across the WPA amendments of 1982, 1986, and 1991 is the growing centralization of authority. Moreover, there are notable gaps where the protection of wildlife and specific geographic areas is entirely dependent on the discretion of government authorities, as evident in certain sections of the Act.

The Wildlife (Protection) Amendment act 2002

The 2002 amendment to the Wild Life Protection Act introduced several significant changes aimed at strengthening wildlife conservation and management. It emphasized ecological and environmental objectives in the Act's long title and added new definitions to support the proposed amendments. The amendment gave statutory status to the National Board for Wildlife, restructured State Wildlife Advisory Boards to ensure broader representation, and introduced safeguards to prevent the killing of animals under the guise of them being dangerous to human life and property. It streamlined and expedited the final notification process for sanctuaries and national parks to mitigate biodiversity loss during the interim period and required National Board for Wildlife recommendations for any boundary changes to these protected areas. The amendment banned the commercial sale of forest produce from national parks and sanctuaries, prohibited construction of commercial tourist infrastructure within these areas without prior approval from the National Board for Wildlife, and empowered officers to evict encroachments from these protected zones. It also established provisions for the creation and management of conservation reserves and community reserves, mandated that zoos acquire or dispose of animals only through recognized facilities, and restricted the acquisition of Schedule I and II animals or their derivatives to inheritance only.

Additionally, the amendment enhanced penalties for offenses, incorporated provisions modelled after the Narcotic Drugs and Psychotropic Substances Act, 1985, for serious wildlife crimes, increased rewards for assisting in detecting offenses, raised the compensation ceiling from ₹2,000 to ₹25,000, and mandated the confiscation of vehicles, weapons, and tools used in compoundable offenses, ensuring they were not returned to offenders.

The Wildlife (Protection) Amendment Act, 2006

In 2006, there were some major changes brought in to the act. Under Section 348 of the Wildlife (Protection) Amendment Act, 2006, the Central Government established the Wildlife Crime Control Bureau, also referred to as the Tiger and Other Endangered Species Crime Control Bureau, comprising various directors, commissioners, and other officers. Another significant change was the establishment of the National Tiger Conservation Authority (NTCA). Initially formed as the Tiger Task Force (TTF) in 2005, it was later given legal recognition under the Wildlife (Protection) Act in 2006. This amendment holds particular importance in the context of the alarming decline in tiger populations, reflecting the government's commitment to protecting tigers through innovative approaches and institutional frameworks. The NTCA is also tasked with providing a clear vision to the Parliament while prioritizing the livelihood security of communities residing in and around tiger reserves.

The Wildlife (Protection) Amendment Bill, 2013

Although this bill did not progress to become an act, it served as a significant stepping stone in the development of the Wildlife Protection Act, introducing many globally relevant concepts and sparking important conversations around them. The 2013 amendment bill was introduced in response to the rising incidence of wildlife crimes, the need to encourage community participation, the ever-evolving biological landscape, and India's international obligations under the Convention on

International Trade in Endangered Species of Wild Fauna and Flora (CITES), of which India is a signatory. Key provisions included banning the use of animal traps without prior approval, allowing permits for scientific research under strict conditions, increasing penalties for wildlife-related offenses, and safeguarding the rights of local communities, particularly Scheduled Tribes in the Andaman and Nicobar Islands. The bill required anyone possessing animal traps to declare them within 60 days of enactment and prohibited their use, trade, or ownership without the approval of the Chief Wildlife Warden.

Additionally, the bill allowed for certain exemptions, such as livestock grazing, movement, and the legitimate use of water for drinking and household purposes by local communities. It sought to regulate the trade of Endangered species and introduced specific schedules for flora and fauna in line with CITES requirements. However, despite its progressive measures, the bill faced criticism for its impracticalities and accountability gaps. For instance, one major change involved redefining 'wild animal' to include any animal found in the wild, extending protections to all fish except those bred in captivity. Critics argued this could severely impact the fishing industry and local livelihoods, as licenses would be required for selling, cooking, or purchasing fish. Researchers also expressed concern that such a broad definition could reduce the clarity and enforceability of the Act, complicating wildlife regulation.

Further, the bill required Gram Sabha consultations before designating any Scheduled Area as a National Park, but it lacked a robust mechanism to monitor these consultations, raising concerns about transparency and effective implementation. The imposition of stricter penalties, such as a minimum seven-year imprisonment and fines ranging from ₹5 lakh to ₹30 lakh for offenses in tiger reserves, was criticized for being overly harsh, potentially deterring courts from convicting offenders. While the Chief

Wildlife Warden was authorized to issue research permits, concerns were raised about the potential for excessive bureaucratic control over conservation research. Minor infractions, such as trespassing or violating permit terms, could result in a minimum three-year imprisonment and fines, potentially stifling ecological research and academic freedom. Despite its ambitious objectives, the bill encountered procedural delays and was eventually withdrawn on 18 March 2015, without becoming an amendment to the law. This highlighted the challenges of wildlife governance in India, emphasizing the need for a balanced approach that integrates ecological conservation with the socio-economic realities of a diverse nation. Lessons from this experience informed the subsequent Wildlife (Protection) amendment Act of 2022.

The Wildlife (Protection) Amendment Act, 2022: A Road Ahead

The 2022 amendment to the Wildlife Protection Act focused on strengthening wildlife conservation through three primary avenues: implementing India's commitments under CITES, protecting native species, and enhancing law enforcement measures. A significant change introduced in the very first page of the Act was the replacement of the phrase "protection of wild animals, birds, and plants" with "conservation, protection, and management of wildlife." This substitution has been widely regarded as a progressive and holistic shift, reflecting a broader legislative intent to address wildlife conservation in a more dynamic and comprehensive manner.

The inclusion of "invasive alien species" in the amendment was another crucial step, addressing the severe ecological challenges posed by invasive species, an issue compounded by limited research and management efforts across India's diverse ecosystems. A major overhaul of the Act was the revision of its schedules, reducing their total number from six to four. The revised structure now includes two schedules for specially protected animals—

Schedule I (providing the highest level of protection, covering 597 species) and Schedule II (offering lesser protection, covering 1,553 species); one schedule for specially protected plants (Schedule III, which now lists 19 species, up from the previous six); and Schedule IV, which focuses on regulating trade in species listed under CITES. Schedule IV is further divided into three appendices: Appendix I (627 species), Appendix II (497 species), and Appendix III (217 species), all of which represent species subject to international trade restrictions to prevent over-exploitation and align with global biodiversity conservation efforts.

The amendment also introduced an entirely new chapter (Chapter VB) to reflect India's obligations under CITES. This chapter regulates international wildlife trade and ensures India's legislation aligns with its global commitments. Additionally, the amendment expanded the scope of permitted activities in protected areas, allowing for filmmaking alongside photography, scientific research, and tourism, provided such activities do not harm wildlife or their habitats.

Several other provisions in the amendment aim to further strengthen wildlife conservation and management. For instance, the definition of "Person" has been expanded to include firms, companies, authorities, and associations, thereby broadening accountability under the Act. The term "zoo" has also been redefined to include ex-situ conservation facilities and rescue centres. The requirement to consult Gram Sabhas while preparing management plans for wildlife sanctuaries underscores the importance of involving local communities in conservation efforts. Restrictions on renewing arms licenses for individuals residing within 10 km of wildlife sanctuaries aim to better regulate human activities near sensitive areas. Additionally, the Act mandates the surrender of captive animals, trophies, and other wildlife products without imposing punitive measures or offering compensation, simplifying compliance.

Finally, the amendment enhances enforcement mechanisms by empowering the Management Authority and officers of the Wildlife Crime Control Bureau (WCCB) to file legal complaints, thereby improving the capacity to address wildlife-related offenses and violations.

Despite the numerous amendments made to the Wildlife Protection Act over the years, challenges in its enactment and implementation persist. These amendments have indeed strengthened the legal framework, but gaps remain in effectively enforcing these laws, particularly in addressing wildlife crimes, habitat degradation, and human-wildlife conflict. Issues such as inadequate funding, bureaucratic hurdles, lack of coordination between authorities, and challenges in local community involvement continue to hinder the law's success in achieving its intended conservation goals. These ongoing difficulties highlight the need for a critical examination of the law's weaknesses and the persistent challenges it faces in ensuring effective wildlife protection. In the following section we will delve into some of these issues, exploring the limitations and gaps that still exist within the current framework.

Weaknesses and Challenges in the implementation

The Wildlife Protection Act, despite its important role in safeguarding India's biodiversity, faces several significant challenges in its enforcement and application.

Centralisation of the authority: One of the core issues is the centralization of authority within the legal framework, which has increased over time, particularly through amendments. While centralization aims to create uniformity in policy, it often leads to inconsistent implementation across different states. Local authorities frequently lack the resources, training, and autonomy necessary for effective enforcement. This issue is further compounded by the inadequate enforcement of the

law, particularly in border regions, which are often exploited by wildlife trafficking networks. Despite the imposition of stronger penalties over the years, poaching and illegal wildlife trade persist, with a dismal 2% conviction rate for wildlife crimes. Forest departments and law enforcement agencies are also plagued by limited resources, further hindering their ability to act effectively against wildlife crime.

Prioritisation of development over conservation:

The economic pressures of industrialization, agriculture, and urban expansion continue to encroach upon protected areas, further undermining habitat conservation efforts. Establishing new protected areas is complicated by issues such as land acquisition disputes, community resistance, and insufficient funding. These pressures are often prioritized over conservation, leading to weakened protections for biodiversity. In landmark cases like *Consumer Education & Research Society vs. Union of India, 1975*, the government has allowed the reduction of protected area boundaries to accommodate industrial and economic interests, such as mining, leading to a disconnect between legal provisions and actual wildlife protection.

Weak enforcement: The weak enforcement mechanisms are also reflected in the challenges faced by forest guards and enforcement personnel. They are often inadequately trained, under-equipped, and lack the expertise necessary to handle poaching, wildlife trafficking, or to understand species diversity and animal behaviour. Similarly, police and customs officials, who frequently encounter wildlife crimes, also lack the necessary training to identify illegal wildlife products and deal with cases effectively. Section 11(2) of the WPA, which allows for the killing of animals in self-defence, is also prone to misuse, adding another layer of complexity and ambiguity to enforcement.

Illicit trade: Furthermore, while the WPA has provisions for regulating wildlife trade, illicit trade continues due to insufficient monitoring and poor

implementation. The Act's penalties, although strengthened, remain disproportionately low, failing to deter wildlife crimes effectively. Additionally, the Act does not sufficiently address integrated landscape management or long-term solutions for species recovery, which are vital for sustainable conservation.

Overcrowding in the Schedule I: The overcrowding of Schedule I with an excessive number of species, without proper consultation or rationalization, further dilutes the effectiveness of the Act. Some species that may no longer require the highest level of protection are still placed in Schedule I, leading to inefficient resource allocation and complicating conservation efforts. The WPA's limited approach to biodiversity health and ecosystem conservation illustrates a growing need for a more inclusive, scientifically grounded, and transparent approach to conservation in India. Without addressing these gaps, the effectiveness of the Wildlife Protection (Amendment) Act, 2022 will remain limited, leaving significant conservation challenges unmet. We will try to understand some of the most important and crucial challenges and contradictions in the law which may make it difficult for the law to be enforced to conserve the nature as a whole.

Limitations of the NTCA: The National Tiger Conservation Authority (NTCA), established in 2006 under the Ministry of Environment and Forests (MoEFCC) as per Chapter IV B (Section 38L) of the Wildlife Protection Act, plays a pivotal role in tiger conservation in India and itself pose as a challenge to the implementation of the law. Its primary duties include overseeing Project Tiger, approving tiger reserve conservation plans, conducting national tiger population surveys, and maintaining a national tiger database. Additionally, the NTCA supports states in implementing monitoring and protection strategies, addressing human-wildlife conflicts, and promoting community participation in conservation efforts. However, challenges remain in effectively enforcing the law, as NTCA faces issues such as resistance to

modernizing traditional field practices, scrutiny from NGOs and field staff, and pressure to deliver results quickly. Furthermore, its relatively new status poses hurdles in recruitment, training, and infrastructure development, which are essential for enhancing its operational effectiveness.

Contradictory to other laws: A significant challenge lies in the contradiction between the Wildlife Protection Act, 1972, and the Forest Rights Act, 2006. According to the Wildlife Protection Act, before declaring an area as a National Park, the State Government must resolve all forest rights issues and provide alternative resources to forest-dependent communities. Once the National Park is declared, all forest rights are considered resolved. However, there have been instances of protests by people whose rights have not been addressed or resolved. The Forest Rights Act, 2006, was introduced to address these concerns, but it cannot be fully implemented as it contradicts certain sections of the Wildlife Protection Act, 1972. This highlights the need for better integration of laws concerning nature and biodiversity.

Limitations of the CZA: The 1991 Amendment established the Central Zoo Authority (CZA), aimed at regulating zoos and ensuring their role in ex-situ conservation, setting standards for animal welfare, and preventing unethical treatment. However, despite these regulatory measures, issues related to ethical concerns surrounding zoo operations still persist. As already discussed, the 2023 Amendment continued to enforce these regulations but also expanded zoo responsibilities to align with international agreements like CITES and address invasive species concerns. While these amendments reinforced provisions for animal welfare, they have been criticized for ethical gaps, particularly in relation to the rules governing the elephant trade, which could potentially enable exploitation for non-conservation purposes. Although zoos now play a more active role in conservation efforts, such as in rehabilitation and breeding programs, challenges

remain in ensuring that all zoos are genuinely committed to animal welfare and conservation. Public trust is often hindered by gaps in regulation and the lack of proper enforcement in certain areas, particularly regarding the treatment of animals and the allocation of resources. Zoos, evolving from simple enclosures to spaces for education and conservation, must navigate the difficult balance between educating the public, ensuring ethical treatment of animals, and contributing meaningfully to wildlife protection efforts.

Decision-making vested on individuals: One other significant challenge in the proper implementation of the law is the concentration of decision-making power in the hands of individuals, particularly the Chief Wildlife Warden. This individual has the authority to decide on key matters such as granting research permits and determining compensation amounts. As the law does not clearly define the criteria for granting permissions or setting compensation amounts, these decisions are left to the discretion of the Chief Wildlife Warden. This creates a situation where personal biases can influence the implementation of the law, which undermines its effectiveness and fairness.

These gaps in policy enforcement and ethical concerns continue to pose challenges for the role of zoos in modern conservation, highlighting the need for more integrated and updated frameworks to address the complex issues of animal welfare, trade, and conservation priorities. Another significant issue is the unscientific and static approach to the listing of species in the protection schedules, which makes the law overly protective and distorts its alignment with broader conservation principle. Here, we are trying to decode and understand the mechanism of listing the specie into the different schedules.

Placing Species in Different Schedules of the WPA, 1972

Another critical challenge is the insufficient scientific approach embedded in the WPA. The Act categorizes

species into different schedules, which determine the level of protection they receive. Although the Act has undergone several amendments over time, its focus largely remains on legal protection rather than a comprehensive approach to conservation of ecosystems and wildlife health. While provisions exist to regulate trade and poaching, they fail to address the broader conservation needs such as habitat restoration and species recovery. Moreover, amendments such as the Wildlife Protection (Amendment) Act, 2022, introduce challenges, especially with the categorization of species into schedules. The absence of a transparent and scientifically rigorous methodology for assigning species to these schedules undermines the credibility of the process. Unlike the IUCN Red List, which uses population trends, habitat conditions, and threat levels to classify species, the WPA's categorization appears arbitrary, leading to misaligned conservation priorities. For example, endangered species like the tiger and Critically Endangered species like the Great India Bustard are placed alongside Least Concern species, such as Jackals and Barn Owls, making it difficult to prioritise species with the greatest conservation needs. Additionally, the inclusion of invasive species in high-protection schedules—such as the Spotted Deer (Chital) in the Andaman Islands—hinders necessary management measures and fails to account for ecological roles and potential impacts on native biodiversity.

Increased risk to species like Tigers and Elephants arises from the Wildlife Protection (Amendment) Act, 2022, as its failure to prioritize conservation resources based on specific threats and needs undermines their effective protection. While these species are granted the highest protection under Schedule I, the lack of a focused approach dilutes the attention and resources required for their conservation. The lack of taxonomic clarity, inconsistent criteria for assigning species to schedules, and inadequate representation of narrowly endemic species significantly undermine

their protection. Many high-priority species remain unlisted, leaving them vulnerable to threats like habitat loss and collection for trade. Kunte (2008) emphasizes the need for systematic analysis of invertebrate species' conservation values to improve their representation under the Act for the Act before the latest amendment but this, comment is valid for the 2022 iteration as well.

The placement of species under the schedules of the WPA, 1972, reflects the dynamic nature of conservation priorities in India, though the law fails to be dynamic. Gaps in the inclusion of invertebrates highlight areas that require immediate attention. Strengthening the scientific framework for assigning species to schedules and addressing these shortcomings will enhance the Act's impact, ensuring better conservation outcomes for India's rich biodiversity.

Conclusion

The evolution of wildlife protection laws in India highlights a journey shaped by socio-cultural values, colonial exploitation, and post-independence challenges. Pre-colonial conservation efforts were largely influenced by religious and cultural beliefs, with a deep connection to nature. During the colonial era, conservation became secondary to resource exploitation, as policies prioritized governance over ecological balance. However, post-independence India began to recognize the importance of biodiversity conservation, culminating in the establishment of the Wildlife Protection Act (WPA) of 1972. This Act introduced a legal framework for protection, providing schedules for species protection and formalizing the creation of protected areas. Over time, amendments to the WPA expanded its scope to address emerging conservation challenges. Notably, the 2006 amendment led to the formation of the National Tiger Conservation Authority, while the 2022 amendment aligned India's policies with global conservation agreements like CITES.

The WPA aimed to tackle a range of critical issues, such as poaching, habitat protection, scientific conservation, and community involvement. To address poaching and wildlife trade, the Act introduced stringent penalties and licensing mechanisms, while fostering the creation of national parks, wildlife sanctuaries, and conservation reserves. It also set provisions for species management and recovery. Over time, local communities have been gradually included in protection efforts, though their participation remains limited. Despite these strides, significant challenges persist. The centralization of decision-making under the WPA often limits local autonomy, creating inefficiencies in its implementation. Habitat fragmentation and increasing human-wildlife negative interactions continue to undermine conservation objectives. Furthermore, weak enforcement mechanisms and low conviction rates in wildlife trade cases hinder efforts to curtail illegal activities. The arbitrary classification of species in the WPA's schedules has also raised concerns about the lack of transparency and scientific rigor in conservation priorities. Additionally, overlaps between the WPA and other legislation, such as the Forest Rights Act, often complicate enforcement and implementation.

Several weaknesses in the implementation of the WPA worsen these challenges. Limited resources and inadequate capacity-building for enforcement agencies emasculate the Act's effectiveness. Ethical concerns, including the unregulated treatment of captive wildlife and the functioning of zoos, raise questions about the ethical foundations of conservation efforts. The static nature of the WPA also fails to address the evolving challenges in wildlife protection, necessitating a more dynamic approach to conservation.

The significant role of Indira Gandhi in shaping India's wildlife protection policies and her leadership during the Stockholm Conference in 1972 marked a pivotal moment in the country's conservation history. During the UN Conference on the

Human Environment in Stockholm, Indira Gandhi emphasized the need for sustainable development and highlighted the importance of protecting India's biodiversity. This speech set the stage for the enactment of the Wildlife Protection Act later that year, signalling the beginning of a concerted effort to safeguard wildlife in India. Her leadership, coupled with the global environmental consciousness raised at the Stockholm Conference, brought international attention to India's biodiversity issues and catalysed the formulation of robust conservation laws.

To improve the effectiveness of wildlife protection in India, several key reforms are necessary. Empowering local authorities and communities through decentralized decision-making can ensure that conservation strategies are more inclusive and participatory. A focus on integrated landscape management would help ensure habitat connectivity and resilience, addressing issues of fragmentation. The scheduling process should be revised, incorporating clear scientific criteria to ensure that conservation priorities are set based on sound research. Investment in capacity-building for enforcement personnel is crucial to tackle challenges like poaching and habitat degradation. Legal integration, harmonizing the WPA with other environmental and social laws, would reduce contradictions and enhance governance. Finally, strengthening community engagement mechanisms can help ensure equitable benefit-sharing and foster long-term commitment to conservation.

In conclusion, while the Wildlife Protection Act and related policies have been instrumental in India's efforts to protect its rich biodiversity, the dynamic nature of conservation challenges calls for a more adaptive, inclusive, and scientifically grounded approach. By addressing existing gaps and integrating ecological, social, and economic considerations, India can enhance its wildlife protection frameworks, ensuring that conservation efforts remain effective and sustainable for future generations.

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