

Human-Animal Conflict Management Through Judicial Intervention: A Critical Analysis

Subhasmita Nanda^{1*}, Dr. Gyanendra Kumar Sahu²

^{1*}Research Scholar, PG Dept. of Law, Utkal University

²Assistant Professor, PG Dept. of Law, Utkal University

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Abstract

Laws and policies play an equally essential role in the attempt to conserve species as do science, technology and institutional management. Effective legal policy execution will turn conservation into a success story and promote sustainable development. Socio-economic development most of the time takes place at the expense of environmental degradation in India. Legal provisions can help to address the country's conservation issues and governance tools. The study aims to understand how law and policies act as vital tool to change the prevailing conflict to a peaceful conservation. The study highlights the Wildlife (Protection) Act, 1972, Environment (Protection) Act 1986, Forest (Conservation) Act 1980 and associated state legislation as the primary legal framework governing conservation of wildlife and their natural habitats in India. Furthermore, the study examines the effectiveness of legal provisions in addressing human-animal conflict and identifies gaps in implementation and enforcement. It also explores the role of national policy interventions such as, protected area management, eco-sensitive zone and community-based conservation initiatives in mitigating conflict. Through a critical analysis of the legislature and judicial pronouncement related habitat conservation, this study elucidates the complexities of human-animal conflict in India and provides insights into the strengths and limitations of existing legal and policy frameworks. It underscores the need for interdisciplinary approaches and greater community engagement to achieve sustainable coexistence between humans and wildlife in India's diverse landscapes.

Keywords: Law, Human-wildlife conflict, wildlife habitat, judiciary, conservation

Introduction

One of the biggest threats to India's wildlife is conflict between humans and wildlife, which can occur in many different forms and ranges widely in intensity.¹ Conflict indirectly exacerbates additional issues that affect the survival of wild India in addition to directly endangering particular species and their ecosystems.² If we go through the everyday news, human-animal conflict³ is a highly politicised topic that frequently prompts strong feelings and hasty decisions. Although the extent and scope of this conflict are not new, they have been growing rapidly over time and are projected to continue doing so indefinitely due to India's constantly expanding population, ever-diminishing forests, and a host of other issues. Therefore, it is crucial to consider conflicts in the larger context of habitat loss, population increase, poverty, and an administrative and judicial environment that is generally unresponsive. With an estimated 30,000 wild Asian elephants, India is home to the greatest number of these animals. These wild elephants losing their typical foraging habitats and moving closer to human settlements. By the 2020s, the figures had skyrocketed: each year, over 500 people die in contacts with elephants, and over 100 elephants perish as a result of human-related causes such as

¹ Human-wildlife conflict one of the greatest threats to wildlife species: WWF and UNEP report, (8 July 2021) <https://www.wwfindia.org>.

² Gureja N., Kumar A., and Saigal S., *Human-Wildlife Conflict in India*, National Biodiversity Strategies and Action Plans (NBSAP), <https://kalpavriksh.org/wp-content/uploads/2019/05/Human-wildlife-Conflicts-January-2003>.

³ Human-wildlife conflict is a threat to conservation and sustainable development. It refers to 'struggles that emerge when the presence or behaviour of wildlife poses an actual or perceived, direct and recurring threat to human interests or needs, leading to disagreements between groups of people and negative impacts on people and/or wildlife' Human-Wildlife Conflict Global Perception Survey (November 9, 2023) <https://www.worldbank.org>.

poisoning, train collisions, poaching for ivory. Tigers are an important part of the country's wildlife history and culture, and India is a home of more than 75% of the world's wild tiger population.⁴ Conflicts between humans and tigers have also existed for decades. If the corresponding forest departments do not adequately address these disputes, it may result in increased friction among the local community. The response from the local communities is virtually always to urge that tigers also known as man-eaters and to be killed. On the other hand, a variety of other factors, such as laws and policies, also influence the forces that drive the conflict locally. Legal and regulatory initiatives, especially those pertaining to wildlife management and land-use planning, frequently exacerbate this expanding issue. Valid research always depends upon the thorough review of related literature. Therefore, a detailed qualitative assessment of the available literature from various fields was undertaken for this study by analysing relevant books, research articles, news items, reports, seminar papers, case laws, interviews and other materials. The researchers make an effort to characterise the rising graph of conflict between humans and animals from the past to the present despite having restricted resources. The purpose of the study is also to determine fundamental concepts about research issues, to evaluate theories and concepts related to studies, and to identify relevant areas and sectors covered by previous research works. For a coherent notion of evolution and the historical context of wildlife conservation, a theoretical and historical review was conducted. Many relevant publications and research articles authored by conservationists, forest officers, wildlife advocates, and academicians on a national and international scale have been added to this. As a result, annual reports, projects, recent news items, and seminar papers from government and non-governmental organisations are being evaluated in order to provide a conceptual understanding of current and existing wildlife concerns. The researcher obtained comprehensive information regarding the conservation status of wild animals in the country by reviewing key supporting information and publications.

Present Scenario of Human-Wildlife Conflict (HWC) in India

Human-wildlife conflict arises when the presence or behaviour of a wild animal poses a direct threat to humans or human belongings. However, it often creates disagreements between groups of people, such as those living near forest areas or protected areas, and it has a negative impact on conservation.⁵ If we describe human-animal conflict as a natural term, it refers to any encounter between humans and animals.⁶ However, these days, it frequently has a more detrimental effect and is one of the major challenges to the conservation of wildlife, especially in growing and populous countries like India.

Human-wildlife conflict, according to the author *Francine M. Madde*,⁷ is quickly becoming one of the most serious dangers to the survival of many wildlife species, particularly huge and critically endangered creatures like tigers, lions, wolves, elephants, and gorillas, who are directly affected by the conflict. The primary reasons of the growth in HWC include the expansion of human populations into or close to places that are home to wildlife, as well as the intensification and modification of human activities in those areas and the fragmentation and loss of habitat in those areas. The declaration of protected areas, where human activity is prohibited or highly controlled, that are insufficient in size for animal needs, is another underlying cause of HWC. As a result, wildlife uses human-occupied places outside of protected areas to survive, causing conflict. Misguided policies and laws, or gaps in legal and policy frameworks, can contribute to HWC. In the recent times, human-wildlife conflict is a crucial aspect for the conservation challenges. Contact between people and wild animals are growing, as people boundlessly encroach on natural ecosystem. As a result, various conservation initiatives have been introduced for wild animals in the inhabitable regions where they may have been squeezed.

States Frequently Enduring Human-Elephant Conflict

In India, the number of elephants in Odisha is highest among the other states, but there are significant conflicts between humans and elephants that have an adverse effect on rural life, especially in mineral-rich districts like Dhenkanal, Angul, Keonjhar, and Sundargarh.⁸ Elephants are usually migratory animals, and the main causes of their habitat loss are mining operations and the construction of roads, railroads, and canals. The State witnessed human-elephant conflict, with 227 human deaths and 130 elephant deaths in the last ten years. Furthermore, farmers in rural regions have to deal with severe crop-raiding by wild boars, which force them to erect electric fencing around their fields, thereby putting elephants in risk.⁹ In Kerala, the situation is particularly acute in regions like

⁴ *Waking to the call of The Wild, India's rich wildlife heritage is under threat as human-animal conflicts intensify, driven by habitat loss and encroachment, and as conservation efforts face urgent challenges.* (March 2, 2024) The Hindu.

⁵ IUCN (2020). IUCN SSC Position Statement on the Management of Human-Wildlife Conflict. (IUCN Species Survival Commission (SSC) Human-Wildlife Conflict Task Force).

⁶ Whitehouse-Tedd K., Abell J., Dunn A.K. (2020). *Evaluation of the use of psychometric scales in human-wildlife interaction research to determine attitudes and tolerance toward wildlife.* Conservation Biology 35:533-547.

⁷ Madden, F., *The Growing Conflict Between Humans and Wildlife: Law and Policy as Contributing and Mitigating Factors.* *Journal of International Wildlife Law & Policy*, 11(2-3), pp.189-206. (2008)

⁸ The Hindu, *Supra* note 4.

⁹ *Id.*

Wayanad,¹⁰ where the proximity to multiple forest reserves and the destruction of traditional habitats due to commercial plantations has exacerbated the problem.¹¹ Where elephants and humans coexist, human-elephant conflict (HEC) is a significant problem. The fact that more than half of the wild Asian elephants in the world coexist with humans in India, which is home to more than one-sixth of the world's population, the protection of Asian elephants there is of utmost significance.¹² In broader terms, the Indian government has recorded thousands of incidents involving wild elephants, boars, tigers, and leopards, leading to significant crop and property losses as well as human and livestock fatalities.¹³ The complexity of managing these conflicts is compounded by the need for coordinated efforts across multiple states and the challenges in maintaining infrastructure and resources to protect both human and wildlife populations.

Human-Wildlife Conflict and Habitat Conservation

Approximately, 38% of the land on earth has already been used for agricultural by humans¹⁴. In addition, for the sake of development, people transformed a large number of lands for infrastructure, mining, and industry. As a result, just 15% of the planet's land surface is set aside as terrestrial protected areas with the goal of preserving biodiversity¹⁵. Human pressure on protected areas is enormous, and this ultimately results in conflict between people and animals. The majority of human-wildlife conflict in developing nations happens on the periphery of protected areas, where the local villagers are continuously up against difficulties.

Protection of Wildlife under Indian Constitution

The Indian Constitution provides a robust framework for the protection of wildlife and environment, through fundamental duties¹⁶ and directive principles of state policy¹⁷. Judicial action in recent years has sparked the lack of a clear provision in the Constitution acknowledging the fundamental right to all living beings including animals¹⁸. At first, there were no explicit provisions for protecting the environment or animals in the Indian Constitution. The Indian Parliament passed the 42nd Amendment to the Constitution in 1976 as a result of growing public awareness of the environmental situation, including the hunting and eradication of animals, the Stockholm Conference, and the environmental movement during the 1970s. The environment, forests, and wildlife are now directly protected under the modified Constitution. "Environmental Constitutionalism and Duties of Individuals in India"¹⁹ the article provides a clear definition of "environmental constitutionalism". The author of this paper spoke and looked at how the environmental rights and duties outlined in the constitution are dynamic and mutually reinforcing. He has provided a detailed account of its path from the Stockholm Conference to its incorporation into the 42nd Amendment of the Indian Constitution and its implementation through judicial activism in recent days for the protection of flora and fauna of the nation.

Key Legislation for Wildlife Conservation

¹⁰ Balan S., Deaths in human-animal conflict in Wayanad spark protests and debates (6 March 2024) <https://india.mongabay.com>.

¹¹ Varma V, Kerala declares man-wild conflicts a 'disaster', (March 7,2024) <https://www.hindustantimes.com>.

¹² Vivek Thuppil & Richard G. Coss, Using Threatening Sounds as a Conservation Tool: Evolutionary Bases for Managing Human–Elephant Conflict in India, *Journal of International Wildlife Law & Policy*, 15:2, 167-185, (2012).

¹³ *Supra* note 12.

¹⁴ Sustainable Food and Agriculture, www.fao.org (2020)

¹⁵ Report shows 15% of terrestrial and 7% of marine areas now covered by protected areas, www.iucn.org (2018)

¹⁶ Article 51A (g) of the Constitution places a duty on every citizen to *protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures. It also included forests and protection of wild animals in the Concurrent List under Seventh Schedule, Article 256 of the Constitution.*

¹⁷ Article 48A provides that *State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.*

¹⁸ Article 21 of the Constitution, while safeguarding the rights of humans, protects life and the word "life" has been given an expanded definition and any disturbance from the basic environment which includes all forms of life, including animal life, which are necessary for human life. *Animal Welfare Board of India vs A. Nagaraja & Ors on 7 May, 2014.*

¹⁹ Lovleen B, *Environmental Constitutionalism and Duties of Individuals in India*, *Journal of Environmental Law*, 34, 399-418, (Oxford Academic 2022) <https://doi.org/10.1093/jel/eqac010>.

The route of animal conservation has always been fraught with inconsistencies over the decades due to unwarranted pressure from powerful in the society. The Wildlife (Protection) Act of 1972²⁰ is a major piece of law in India that defines and governs the term "wildlife," which refers to a wide variety of different living organisms. The act came into effect in 1972. The introduction of this legislation, which is known as the Wildlife Protection Act, acts as a fundamental component of Indian wildlife law. The Wildlife (Protection) Act of 1972 plays a crucial role in the preservation of habitats in India.

The legislation facilitates the establishment of Protected Areas,²¹ encompassing many types such as National Parks, Wildlife Sanctuaries, Conservation Reserves,²² and Community Reserves.²³ Each category entails distinct degrees of protection and engagement with local communities. Preservation of natural habitats in these locations plays a crucial role in safeguarding the diverse species and upholding ecological equilibrium.

Every States having sanctuaries and national parks are required to notify an Eco-fragile zone²⁴, under section 3(v) of the Environment (Protection) Act 1986 and rule 5, sub-rule (viii) & (x) of the Environment (Protection) Rules, 1986. Strict regulations for various land use patterns surrounding the protected areas, near to the wildlife habitats are a necessary first step in the notification of eco-fragile or eco-sensitive zones. One example of a contemporary law for the preservation of forests that emphasises sustainable management, biodiversity protection, and control over land use changes is the Forest Conservation Act of India (1980). In addition to limiting the use of forest lands for purposes other than forest management, these regulations also require certain operations to undergo environmental impact evaluations.

Judiciary as the Protector of Natural Habitats and Wildlife Corridors

The Indian judiciary has emerged as a pivotal protector of wildlife corridors and habitats, playing a crucial role in balancing development with environmental conservation. Through landmark judgments and proactive stances, courts in India have enforced stringent regulations to prevent encroachments and mitigate human-wildlife conflicts. For instance, the Supreme Court of India and various High Courts have mandated the creation and maintenance of wildlife corridors, essential for the safe passage of species like tigers and elephants. These judicial interventions often stem from public interest litigations (PILs) filed by environmental activists, reflecting the judiciary's responsiveness to ecological concerns.

From the past history, the Indian judiciary has become a vital defender of wildlife corridors and their habitats, assisting in striking a balance between environmental preservation and development. Indian courts have enforced strict laws to prevent encroachments and reduce conflicts between humans and wildlife through historic judgments and proactive measures. For example, the Indian Supreme Court and other High Courts have ordered the establishment and upkeep of wildlife habitats²⁵, which are necessary for the safe migration of animals such as elephants and tigers. The judiciary's response to ecological concerns is evident in the frequent emergence of these judicial interventions from public interest litigations (PILs) brought by environmental activists.

The Indian judiciary plays a crucial role in protecting the nation's rich biodiversity for future generations by enforcing environmental laws and advocating for the successful implementation of conservation measures. This underscores the

²⁰ Ministry of Environment, Forest and Climate Change, 2021. Wildlife Protection Act of 1972. New Delhi: Government of India.

²¹ Protected areas are those in which human occupation or at least the exploitation of resources is limited. The definition that has been widely accepted across regional and global frameworks has been provided by the International Union for Conservation of Nature (IUCN) in its categorization guidelines for protected areas.

²² Conservation reserves and community reserves in India are terms denoting protected areas of India which typically act as buffer zones to or connectors and migration corridors between established national parks, wildlife sanctuaries and reserved and protected forests of India. Such areas are designated as conservation areas if they are uninhabited and completely owned by the Government of India but used for subsistence by communities and community areas if parts of the lands are privately owned. These protected area categories were first introduced in the Wildlife (Protection) Amendment Act of 2002 – the amendment to the Wildlife Protection Act of 1972.

²³ See *supra* note 22

²⁴ The Supreme Court of India (SC) vide its judgment dated 03 June 2022 in the case of In re: T.N. Godavarman Thirumulpad v Union of India & Ors., I.A. No.1000 of 2003 in W.P. (C) No. 202 of 1995 has held that every national park/wildlife sanctuary should have an eco-sensitive zone (ESZ) of minimum 1 km where developmental activities shall be regulated/prohibited in terms of the Guidelines for the Declaration of the ESZ around the National Parks/Wildlife Sanctuaries issued on 09.02.2011 (2011 Guidelines) by the Ministry of Environment and Forests (MoEF).

²⁵ Forest Conservation Law in India is now impacted not only by the outcome of the Godavarman case (T.N.Godavarman Thirumulpad v. Union of India, AIR 1997 SC 1228) but also the ongoing litigation concerning national park, sanctuaries and wildlife habitats (Protected Areas) through the Centre for Environment Law, *wwf-1 vs. union of India & others* W.P. no. 337 of 1995.

judiciary's role as a custodian of natural heritage amidst mounting challenges from development. Meanwhile, concerns about how well it was carried out remain. But in resolving the disputes, the courts have been essential in interpreting and upholding laws designed to safeguard wildlife while taking impacted populations' welfare into account. Significant rulings have imposed strict penalties for poaching and illegal trading, buffer zones surrounding protected areas, and compensation plans for those affected by animal activities. In order to ensure that progress does not come at the expense of sustainable coexistence, the judiciary's proactive approach has been essential.

By balancing legal frameworks with ecological and social considerations, the Indian judiciary continues to shape policies that strive for harmony between human and wildlife interests. In the *Pradeep Krishan vs. Union of India*²⁶ case, the Supreme Court highlighted that the overall forest area in our nation is much below the recommended minimum of one-third of the total land. Hence, we cannot tolerate any additional reduction in the forest area within our nation. If the presence of villagers and tribal residing in and around the Sanctuaries and the National Park is a contributing factor to the reduction in size, it is imperative that immediate measures are implemented to safeguard the environment, the plant and animal life, and the wildlife in those regions from any harm or destruction. *Tarun Bharat Sangh, Alwar vs. Union of India*²⁷ is a legal dispute that pertains to the issue of mining activities within tiger habitats. The recent petition was submitted by a non-governmental organization dedicated to improving the environment. The petitioners lodged a complaint over the ongoing unlawful mining activities for limestone and marble in the designated tiger reserve region in the Alwar district of Rajasthan. The petitioner implored the court to halt such conduct in order to safeguard the ecosystem and ecology.

National Green Tribunal and protection of Wildlife Habitats

The National Green Tribunal (NGT) is vital to the preservation of wildlife's natural habitats in India. The Tribunal was established by the National Green Tribunal Act of 2010²⁸, with the objective of offering a specialised venue for the efficient and prompt resolution of issues concerning the preservation of forests and other natural resources, including the natural habitats of animals. Elephant corridors²⁹ and forest habitat conservation have benefited greatly from NGT. It has issued a number of noteworthy rulings that have improved the protection of biodiversity. For example, it has mandated the cessation of illicit mining operations and the safeguarding of vital ecosystems³⁰. It has taken the initiative to order safeguards against biodiversity loss³¹. This includes directives to state governments and corporations to implement sustainable practices and restoration projects.³² In accordance with Section 36A of the Wildlife (Protection) Act, 1972, the court's ruling in the matter of Binay Kumar Dalei case³³, also mandates the conclusion of the declaration procedure for the traditional elephant corridor as a conservation reserve. The initial applicant's arguments before the Tribunal was acknowledged by the Supreme Court, which emphasized that mining, should not be allowed in the ESZ until the Comprehensive Wildlife Management Plan is put into effect. The Supreme Court demonstrates its commitment to protecting wildlife by emphasizing the need to implement a comprehensive wildlife management plan and follow the Wildlife (Protection) Act.

In the year 2020, the Supreme Court of India has ruled that 39 unlawful resorts must be removed from an elephant corridor on the Sigur plateau in the Nilgiris of Tamil Nadu.³⁴ The "Precautionary Principle"³⁵ has been acknowledged by

²⁶ Pradeep Kishen v. Union of India Citation: (1996) 8 SCC 599

<https://www.legalbites.in/environment-law/case-analysis-pradeep-kishen-v-union-of-india-1996-forest-rights-of-tribals-981846>

²⁷ (1993) INSC 209,(1993) Sup(3) sec 115

²⁸ The National Green Tribunal Act 2010, is related to the disposal of civil cases in relation to environmental protection and also for the conservation of natural resources. There is an inclusion of legal rights and which are related to the environment.

²⁹ *Wildlife Society of Orissa (Elephant Corridors) vs. State of Orissa & Ors*, (2021)

³⁰ Tribunal at its own motion v. The Secretary Ministry of Environment & Forests, Govt. of India,

³¹ Goa Foudation & ors v. Union of India & ors, Application No. 26 of 2012.

³² Tandon, Usha, Assessing India's Green Tribunal for Conservation of Biodiversity (2018). Biodiversity: Law, Policy and Governance", 200-230, Routledge, Taylor and Francis Group, London, New York, (2018), <http://dx.doi.org/10.2139/ssrn.3432455>

³³ The Supreme Court of India has directed the State of Odisha to enforce a Comprehensive Wildlife Management Plan in the Eco-Sensitive Zone (ESZ) surrounding the Kuldiha Wildlife Sanctuary before authorizing any mining. It also necessitates the completion of the declaration process for the traditional elephant corridor as a conservation reserve under Section 36A of the Wildlife (Protection) Act, 1972. *Binay Kumar Dalei & Ors. vs. State of Odisha & Ors. Civil Appeal Nos.1627-1628 of 2022.*

³⁴ In the Supreme Court of India, *Hospitality Association of Mudumalai vs In defence of Environment and Animals and ors.* civil appeal nos.3438-3439 of 2020.

³⁵ In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific

the Supreme Court as a component of our national legal system. The State Government is required under the Precautionary Principle to identify, stop, and address the root causes of environmental degradation. In this light, the judiciary have no hesitation in holding that in order to protect the elephant population, it was necessary and appropriate for the State Government to limit commercial activity in the areas falling within the elephant corridor. In *Rohit Choudhary v. Union of India*³⁶, the National Green Tribunal, New Delhi (NGT), directed the Railway authorities to free the elephant corridor in Deepor Beel, Assam. In this same order the NGT also directed the authorities to reduce the speed of trains passing through the elephant corridors to avoid accidents³⁷ and safe movements of pachyderms. Furthermore, according to the tribunal, "...the earth is not for humans alone. All creatures including the wild animal have a sacred right. Economic consideration no doubt is important for development but, it should not be at the cost of ecology, bio-diversity and the environment"³⁸.

Conclusion and Suggestions

A critical analysis of the management of human-animal conflicts through judicial intervention demonstrates the intricate interactions that exist between development, wildlife habitat protection, and legal frameworks. It has been demonstrated that judicial involvement is an essential instrument for resolving disputes and guaranteeing the safety and rights of both people and animals. Nonetheless, it is evident that legal actions taken on their own are inadequate. A comprehensive strategy that includes community involvement, scientific research, and sustainable development methods is needed for effective management.

Important precedents have been established by judicial rulings, which emphasises the need for well-balanced approaches that take human interests and ecological integrity into account. However, these measures need to be a part of more comprehensive, integrated policies that include address habitat restoration, public education, and proactive conflict prevention. To design and implement such comprehensive policies, cooperation between local communities, conservation organisations, and government agencies is crucial.

The development of a paradigm for sustainable cohabitation is ultimately the key to resolving disputes between humans and animals. This entails improving legal frameworks as well as promoting a respectable and considerate society towards animals. Judicial action combined with diverse management techniques can reduce conflict, support biodiversity, and improve the welfare of human and animal populations.

Since wildlife habitat is being extensively encroached upon across the country, confrontation is unavoidable. There are several areas of emphasis that need to be addressed and could eventually help to reduce conflict.

Differentiate land-use strategies³⁹ that clearly demarcate areas for human use from those protected for wildlife and enforce this demarcation must be implemented in accordance with forest regulation laws⁴⁰, wildlife legislation⁴¹, and the Eco Fragile Zone under the Environment Protection Act⁴². For effective management, it is also suggested that all forests be incorporated under a single state body.

Due to the extent of the pressure being placed on the present elephant habitat and the fact that these species is a large-ranging one, corridors connecting a network of protected areas may be the only conservation strategy left for the problem of habitat fragmentation in India. Thus, maintenance of some continuity of elephant ranges and to avoid human elephant conflict, corridors should be given the highest priority for the habitat conservation under wildlife law.

Along with community conservation, eco-development programmes should be considered the wildlife legislature for the better socio-economic benefits of rural communities.

Given the level of pressure now being placed on the current habitat of elephants and their wide-ranging distribution, corridors linking a network of protected areas may be the only remaining conservation option to address the issue of habitat fragmentation in India. Thus, corridors should be given top priority for habitat protection under wildlife legislation in order to preserve some continuity in elephant ranges and prevent conflict between humans and elephants.

certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. (Principle 15 of the 1992 Rio Declaration, <https://www.cbd.int/marine/precautionary.shtml>)

³⁶ Rohit Choudhary Vs. Union of India & Ors. Original Application No. 174 of 2013

³⁷ In India, death from train collisions is the second-highest cause of unnatural elephant deaths, after accidental electrocution. Official data shows that more than 200 elephants were killed in train collisions in the past 10 years. <https://www.theguardian.com/environment/2024>

³⁸ *Supra* note 34, the National Green Tribunal, New Delhi (NGT), a three Member Bench (S. P. Wangdi J., K. Ramakrishnan J., De. Satyawan Singh Garbyal)

³⁹ "land use planning" was given by the United Nation's Food and Agriculture Organization (UNFAO) and the United Nations Environment Programme (UNEP) published in 1999. Land use planning is a systematic procedure that allows the sustainable development of land resources in order to fulfil people's needs and demands. It examines the socio-economic, physical, legal, and institutional constraints and potentials with respect to most favourable and sustainable use of land and its natural resources.

⁴⁰ Indian Forest Act of 1927, Forest Conservation Act, 1980, National Forest Policy, 1988.

⁴¹ Wildlife (Protection) Act, 1972, Biological Diversity Act, 2002

⁴² Environment (Protection) Act, 1986

Also the wildlife legislative should take into account eco-development initiatives in addition to community conservation for the better implementation of socio-economic advantages of rural areas.