



CURRENT STUDY ON HUMAN AND WILD ANIMALS CONFLICT IN TADOBA ANDHARI TIGER RESERVES IN CHANDRAPUR DISTRICT OF MAHARASHTRA STATE.

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ABSTRACT:

Human and wild animal's conflict is the destructive relations amongst human and wildlife and is an increasing reason for anxiety between environmentalists and researchers universally. Industrialized areas of the biosphere show poorer stages of straight requirement on forestry bionetworks and their incomes, as well as exclusionary supervision of the wildlife surroundings. India, existence an emerging country, is observe to the growing strength of human and wild animal conflict due to the fast-shrinking percentage of forest shelter, that act as usual habitations of many wild animal species, due to a grouping of features as well as human inhabitants outburst, cultivated enlargement, and significant evolving events, foremost to destruction and devastation of timberland shelter all transversely the state. But there is an unbalanced degeneration in timberland protection as well as superiority, which means that uniform though the inhabitants of enormous wild animals are flourishing, there isn't enough original jungle to livelihood their emerging facts. This ultimately indications to a spill-over of the wild animals into nearby anthropological-controlled lands. This acts as one of the most important explanations for the fast growing quantity of struggle circumstances amongst humans and wild animals.

The Vidarbha Land of the state of Maharashtra is opposite a comparable degeneration in jungle protection most important to a rise in human and wild animal conflict cases. Histories of human and wild animal conflict happenings were composed from the Superior Tadoba Land which covers the divisions of Brahmapuri, Chandrapur & Central Chanda, along with the Tadoba Andhari Tiger Reserve (TATR), in the Chandrapur Circle. The Tadoba Andhari Tiger Reserve and parallel threatened regions show a vital character in preserving India's unlikely biodiversity. One of the most important obstacles in the application of a widespread justification system to control the quantity and influence of Human and wild animals conflict is the substantial effect of resident aspects as well as landscape, undergrowth, and anthropological demography of the district. This has need of a thorough learning of the configurations and origins of struggle in a particular district. Reviewing human and wild animal conflict hotspots and considerate the developing longitudinal and historical configurations is an essential period in the course of justifying the Human and wild animals conflict of several background. The current study was carried out during the period of one year from March,2025 to February,2026 respectively. An essential period in that way is the setting up of a widespread record, which can be hand-me-down for development investigation and likelihoods.

Keywords:- wild animals, conflict, biosphere, hotspots and demography.

INTRODUCTION:

There are various forms of Human and Wild animals' conflict. Sometimes human behaviour creates obstacles in the safety and survival of wild animals, and sometimes the movements of wild animals threaten human life. Due to increasing population and increasing biodiversity, the interaction between humans and wild animals is

increasing day by day. Attacks by poachers in Africa, attacks between tigers in Asia and people and their livestock, and the expulsion of tigers from the forest after the loss of lives of humans and animals in such attacks have increased. Non-life-threatening conflicts are also seen on the rise. In this, incidents of large scale destruction of crops by wild animals are increasing.

Incidents of Human-Wild animals conflict are also seen frequently in Tadoba Andhari Tiger Reserve. Rehabilitation of 6 villages in the core area of Tadoba Andhari Tiger Reserve is underway. But incidents of human and wild animal's conflict continue in 79 villages in the buffer area. Also, Chandrapur is a city with a population of about 4 lakhs near Tadoba. Here too, tigers, leopards, bears etc. are often seen roaming around. Human and wild animal conflict around Tadoba-Andhari Tiger Reserve (TATR) in Chandrapur, Maharashtra, is severe, with 91 tiger-related deaths recorded between 2023 and early 2025. The region has over 200 tigers, leading to frequent incidents in villages near the buffer zone. While, 2022 saw 51 deaths, recent AI-based, virtual fencing has significantly reduced fatalities in pilot villages.

According to the current data and based on the observations the mortality rate in the Chandrapur district (home to Tadoba), 111 deaths were reported in 2022-2023, followed by 59 in 2023-2024. By February 2026, 91 deaths were recorded from 2023-2025 due to tigers, with an additional 10 caused by other animals. So far as in the current year 2025-26 the incidents were found in the month of September-2025 saw at least five fatal attacks in various villages such as Sawali, Mul, Brahmapuri and Chimur respectively. Mostly the Human and wild animal conflicts causes involve attacks on farmers and villagers collecting forest produce in the buffer zone, or in areas where tigers are finding habitat outside protected forest zones. Hence, it has been seen that the loss of livestock's between 2012-13 and 2018-19, over 3,500 animals were killed in conflicts, creating high financial loss for villagers.

Similarly, since the mitigation efforts has been concerned regarding the virtual walls an AI-based system installed to detect animal movement has reduced fatalities from 8 deaths (2019-23) to 1 in implemented areas. According to the current research findings near about ₹8.27 crore was disbursed as compensation in the various regions

of Human and wild animal conflict wherever occurs, with ex-gratia payments covering agricultural and human losses respectively. All these circumstance's taken in to consideration the Government of Maharashtra, Forest Department has been decided that, there is need to involvement of community peoples to give proper training to local tribes as rangers and guides to foster co-existence, with, villages like Moharali, for example, transitioning to tourism-based livelihoods so far. The high density of tigers and increased human activity in the buffer zone continue to drive conflict despite on-going mitigation efforts.

The World Wildlife Fund for Nature (WWF) defines human-wildlife conflict as "any interaction between humans and wildlife that has a negative impact on the social, economic or cultural well-being of humans, on wildlife conservation or on the environment.

Research and policy development on wildlife conservation have been of utmost importance worldwide, but especially in India that is rich in biodiversity. If we want to know how successful animal protection laws are, we need to look at the Tadoba Andhari Tiger Reserve (TATR). Legislative frameworks, human-wildlife conflicts, as well as conservation tactics, and the role of developing technologies in wildlife monitoring are just some of the numerous facets of wildlife protection that have been thoroughly studied. The possibilities and dangers faced by wildlife conservation law enforcement in India are scrutinized in this literature review that amalgamates results from previous investigations. For the most part, conservation initiatives in India are governed under the Wildlife Protection Act of 1972. It authorizes the founding of protected areas to house endangered animals, like national parks, sanctuaries for wildlife, and tiger reserves. To help humans and tigers live together harmoniously in India, Karanth and Gopal (2005) put forward a policy framework based on ecology, emphasizing the importance of well-rounded policies that take

into account local populations' socioeconomic circumstances as well as conservation efforts. Likewise, tiger reserves in the subcontinent were highlighted by Johnsingh, Pandav, and Madhusudan (2010), who also stressed the need for strong law enforcement and habitat management in maintaining the long-term sustainability of tiger populations.

The enforcement and monitoring of wildlife legislation has been greatly aided by government agencies and foreign organizations such as the Wildlife Protection Society of India (WPSI) and the National Tiger Conservation Authority (NTCA) (Athreya et al., 2004). Despite these legislative frameworks, conservation initiatives are nonetheless hampered by implementation gaps and enforcement issues, numerous studies have found. Because expanding human settlements near protected areas have degraded and fragmented habitats, human-animal conflict constitutes one of wildlife conservation's gravest threats.

Barlow's 2009 work on human-tiger conflicts in the Sundarbans highlighted the need for adaptive conflict management, like compensation programs benefitting impacted communities. Worldwide, Inskip and Zimmermann's 2009 examination of human-felid interfaces identified key concerns: livestock killing, assaults, and economic losses.

OBJECTIVES OF THE STUDY

- 1) To examine the effectiveness of wildlife protection laws and their enforcement in Tadoba Andhari Tiger Reserve.
- 2) To analyze the impact of human-wildlife conflict on local communities and conservation efforts.
- 3) To evaluate the role of technology in wildlife monitoring and anti-poaching initiatives.

HYPOTHESIS

H_0 (Null Hypothesis): Human-wildlife conflict has no significant impact on local communities and conservation efforts in Tadoba Andhari Tiger Reserve.

H_1 (Alternative Hypothesis): Human-wildlife conflict has a significant impact on local communities and conservation efforts in Tadoba Andhari Tiger Reserve.

MATERIALS AND METHODS

This current study is based on Primary and Secondary Data during the year March, 2025 to February, 2026 respectively. The data regarding Human and Wild animal conflict incidents and compensations collected from Core and Buffer Zone office of Tadoba Andhari Tiger Reserve. Some Interviews of local in and around buffer zone taken by researcher. Table No. 1 are prepared to show the data during the session-2025-26.

STUDY AREA:

The Tadoba-Andhari Tiger Reserve is located in the eastern district of Chandrapur in Maharashtra. $20^{\circ} 4' 53''$ North to $20^{\circ} 25' 51''$ North Latitude and $79^{\circ} 13' 13''$ East to $79^{\circ} 33' 34''$ East Longitude. The Reserve will be extended to 1727.17 sq.km. is spread across the area. This includes 625.40 sq. km. of core zone and 1101.77 as the buffer zone. On April 9, 1955, Tadoba National Park was formally created enclosing an area of 116.55 sq. km. area. Also on 25/02/1986, Andhari Wildlife Sanctuary had been established in 508.85 sq.km. area. The Tadoba Andhari Tiger Reserve came into existence in 625.40 sq. Km. area on 27/12/2007 by merging Tadoba National Park and Andhari Wildlife Sanctuary on 23/02/1995 (116.55 + 508.85 = 625.40), both Tadoba National Park and Andhari Wildlife Sanctuary were declared as Core or Critical Tiger Habitat. Then after on 5/5/2010, 1101.77 sq. km. area was declared a buffer zone around Tadoba Andhari Tiger Reserve. It covers a total of 79 villages.



Fig. No.1. Satellite Map of Tadoba-Andhari Tiger Reserve Forest in Chandrapur District of Maharashtra State in India.

Table No.1. Human-Wild Animal Conflict Statistics in Tadoba-Andhari Tiger Reserve Buffer Zone during the session-2025-26.

Metric	Details	Compensation (Approx.)	Amount
Fatalities (Deaths)	At least 33 reported by Sept 2025 (30 by Tigers, others by leopard/bear)	~Rs. 15 Lakh per person (Note: Immediate relief of Rs. 50,000 often provided)	
Injuries	Numerous (specific number for buffer not fully compiled)	Varies based on injury severity; small amounts compared to fatalities	
Key Conflict Areas	Moharli, Sawali, Mul, Chimur, Brahmapuri	--	

Collection of Zooplankton

Note: The official, finalized data for the entire 2025-26 fiscal year (ending March 2026) is usually published by the Forest Department after the conclusion of the fiscal year.

Human and Wild Animal conflict statistics shows that, during the session-2025-26 there is rising fatalities cases day by day. The year 2025 witnessed continued high mortality, with many fatal attacks taking place in the buffer zones (e.g., Moharli) during agricultural or forestry work such as bamboo cutting. The Maharashtra government generally provides compensation up to ₹15 lakh per deceased person, with ₹50,000 as immediate relief, as of recent policy updates. Human and Wild Animal conflicts cases raised due to drives at high

tiger density and increased human activity such as collecting non-timber forest products in the buffer zone are primary factors contributing to the conflict.

In the buffer zones of Tadoba Andheri Tiger Reserve and other nearby villages, incidents of crop damage due to wild animals are becoming very serious. Herds of animals like pigs, deer, wild boars, sambars etc. enter the fields at night and damage agricultural crops on a large scale. The government is also seen to be very indifferent regarding crop damage compensation. The government has no concrete policy regarding crop damage compensation. Farmers in the buffer zone and other villages also say that the method of determining crop damage is also wrong.

Climate change is globally recognised as a key driver of human and wild animal conflicts. It creates resource stress in protected areas, forcing wildlife to move closer to human settlements. Anish Andheri, wildlife researcher and president of the NGO Wildlife Conservation Trust (WCT), explained that erratic rainfall leads to crop failure, water stress in forests and forest degradation. "These factors, combined with the spread of invasive species and parasites reducing prey population, significantly contribute to the pressures, driving tigers towards human areas," he said. He also pointed to a shift in habitats where the quality of protected areas reduces and certain regions outside the protected areas, often human habitations, become better habitats for wild animals. Farmlands and livestock, which many forest-dependent communities rely on, therefore serve as a pull factor for predators seeking easy prey on the edges of resource-stressed forests.

CONCLUSION:

CONCLUSION AND SUGGESTIONS

An incident caused by human and wild animal conflict occurs when wild animals escape from the forest. Also, many incidents occur when people go into the forest to fetch firewood, collect wild fruits, and collect tendu leaves. Farmers often face attacks from wild animals while working in fields adjacent to the forest. Therefore, it is necessary to take effective measures at the government level, such as providing fuel facilities, creating alternative employment, etc., to reduce human activity in the forest while providing wildlife with their rightful habitat. "It is not possible to completely stop the incidents of human wildlife conflict efforts are being made to reduce it".

This was stated by the then Principal Conservator of Forests (Wildlife) of Maharashtra State in 2014. Based on this, we need to think about how human and wild animal conflict will continue and how we can reduce the negative impact of this interaction. For this, efforts based on the principle of participation are needed, which are very informed

from social, cultural and economic perspectives, seriously considering the resource availability and based on the principle of participation, while combining human wildlife conflict reduction and forest conservation. In order to reduce human wildlife conflict in Tadoba Andhari Tiger Reserve, there is a need to consider many things such as increasing forest corridors, stopping human movement in the forest, providing water in the forest in summer, etc.

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