

## RESEARCH ARTICLE

# Living with tigers: Perceptions of risk, equity, and cultural change amidst tiger attacks in a reserve's buffer zone

Ashraf Shaikh<sup>1</sup>  | Kulbushansingh Suryawanshi<sup>1,2,3</sup> 

<sup>1</sup>Nature Conservation Foundation,  
Mysore, India

<sup>2</sup>Snow Leopard Trust, Seattle,  
Washington, USA

<sup>3</sup>CIFAR Fellow in Future Flourishing  
Program, MaRSCentre, Toronto, Ontario,  
Canada

**Correspondence**

Ashraf Shaikh

Email: [ashraf.research97@gmail.com](mailto:ashraf.research97@gmail.com)**Funding information**

Rufford Foundation, Grant/Award  
Number: 42383-1; Nature Conservation  
Foundation, Mysuru, India

**Handling Editor:** Soubadra M Devy**Abstract**

1. Large carnivores are widely promoted as flagship species in biodiversity conservation, yet, in high-density landscapes they generate risks to human lives and livelihoods that are unevenly distributed. Understanding how coexistence is sustained under such conditions raises questions of governance, equity, and whose costs are normalized.
2. We examine human–tiger interactions in the buffer zone of Tadoba-Andhari Tiger Reserve, India, focusing on intra-village differences between households that have directly experienced tiger attacks (victims) and neighbouring households that have not (non-victims). We reviewed forest department records of 80 attacks on people between 2014 and 2024, and conducted 50 semi-structured household interviews across 16 villages.
3. Our qualitatively driven mixed-methods approach combined descriptive analyses of attack patterns and socio-economic profiles with inductive thematic analysis of interview narratives to examine how risk, livelihood disruption, cultural meaning, and governance are experienced under shared ecological and institutional conditions.
4. Victim and non-victim households articulated similar normative commitments to tiger conservation, including acceptance of tiger presence and recognition of ecological value. However, their lived experiences diverged sharply. Victim households reported frequent encounters, sustained restrictions on mobility and livelihoods, repeated engagement with compensation processes, and persistent fear. Non-victims more often framed coexistence as requiring vigilance rather than continuous disruption. Cultural practices associated with Waghoba (local tiger deity) worship persisted across households, but among repeatedly affected families, they were described as commemorative rather than protective.
5. *Synthesis and applications.* Coexistence in Tadoba is not a voluntary arrangement but a condition of compulsory coexistence, sustained through the uneven absorption of risk by a subset of households within the same villages. Aggregate indicators of tolerance or acceptance obscure this intra-village differentiation and the cumulative endurance through which coexistence is maintained. Governance

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2026 The Author(s). *People and Nature* published by John Wiley & Sons Ltd on behalf of British Ecological Society.

responses centred on compensation and technical mitigation acknowledge loss without reducing vulnerability where risk is spatially concentrated. Recognizing household-level inequality is therefore essential for evaluating conservation success and designing interventions that address not only biological persistence, but the distributive conditions under which coexistence is lived.

#### KEYWORDS

Chandrapur, compensation, conservation success, shared spaces, tiger attacks, Waghoba

## 1 | INTRODUCTION

Large carnivore populations are recovering in several parts of the world following decades of decline, supported by targeted conservation programmes, strengthened legal protections, and shifting societal attitudes towards wildlife (Chapron et al., 2014; Ripple et al., 2014). Wolves in parts of Europe, lions in southern Africa, and tigers in South Asia have expanded their ranges into landscapes where people live and work (Bernardi et al., 2025; Jhala et al., 2021; Loveridge et al., 2017). These recoveries have intensified interactions between people and large carnivores, often exposing rural communities to heightened risks of harm and livelihood loss.

These changing human–wildlife relations have spurred global interest in ‘coexistence’, which in contemporary conservation scholarship is increasingly understood not simply as the absence of conflict, but as the sustained ability of people and wildlife to share landscapes in ways that maintain viable wildlife populations while keeping associated costs and risks at levels that people consider acceptable (Hill, 2021; Pooley, 2021). This perspective treats conflict as an inherent feature of shared spaces, situating coexistence as shaped as much by governance arrangements, institutional trust, and perceptions of fairness as by ecological metrics alone (Gross et al., 2025).

Recent scholarship has further argued that coexistence must be examined through the lenses of justice, responsibility, and power. Conservation interventions, such as protected areas, ecotourism, compensation mechanisms, and species recovery programmes are not socially neutral. They often distribute risks and benefits unevenly, with marginalized communities bearing disproportionate costs while decision-making authority remains concentrated within state agencies or external conservation actors (Harris et al., 2023; Pooley, 2021). Political ecology perspectives have long documented how conservation in the Global South can reproduce forms of exclusion, dispossession, and unequal exposure to danger, particularly where wildlife protection intersects with neoliberal governance models and tourism-driven development (Fletcher & Toncheva, 2021; Margulies & Karanth, 2018). From this viewpoint, negative interactions with wildlife are not simply ecological events, but outcomes of historically and politically structured relationships between people, institutions, and landscapes.

Empirical studies across diverse contexts demonstrate that people’s perceptions of large carnivores are rarely determined

by direct losses alone. Attitudes are shaped by cultural values, prior relationships with the state, and whether people feel protected, heard and included in wildlife governance (Karanth & Kudalkar, 2017; Manfredo et al., 2020; Nair et al., 2021). In some cases, perceptions may not even align with the actual distribution of conflict: communities can perceive high levels of risk where recorded losses are few, while tolerance may persist in places with frequent damage (Suryawanshi et al., 2013). These complexities matter because conservation interventions are interpreted through the same perceptual lens.

India offers a particularly important setting for examining these dynamics. The country holds over 70% of the world’s wild tiger population and has significantly expanded its protected area network since the launch of Project Tiger in 1973 (Jhala et al., 2025). Government-led national surveys report a steady increase in tiger numbers over the past two decades, from approximately 1411 individuals in 2006 to around 3682 in 2022 (Jhala et al., 2008; Qureshi et al., 2023), although these estimates and their interpretations have been debated (Gopaldaswamy et al., 2019; Harihar et al., 2017). As tiger populations have expanded beyond core protected areas into buffer zones, territorial forests, and agricultural mosaics, interactions with people have increased, particularly in central Indian states, where forest-dependent livelihoods remain widespread (Chanchani et al., 2016; Chundawat et al., 2016; Qureshi et al., 2023).

With a tiger density of more than five individuals per 100km<sup>2</sup>, Tadoba-Andhari Tiger Reserve (TATR) in Maharashtra is one of India’s most high-density tiger reserves (Qureshi et al., 2023). According to the Maharashtra Forest Department’s unpublished records, more than 80 tiger attacks on people were documented in the buffer zone between 2014 and 2024, with 46 resulting deaths. These incidents have taken place alongside rapid tourism development (Sheikh & Vanashree, 2014) and restrictions on forest access due to conservation regulations (Agarwal et al., 2017). Together these processes raise pressing questions about safety and equity.

Previous studies have examined the ecological drivers of negative interactions between people and tigers, documented broad community attitudes towards tigers, and explored the role of cultural beliefs in shaping tolerance (Aiyadurai, 2016; Chatterjee et al., 2022; Dhungana et al., 2022). However, much of this work aggregates perceptions at the village or landscape level. As a result, relatively little attention has been paid to differences within communities,

particularly between households that have directly experienced serious harm and those that have not. This aggregation risks obscuring the ways in which victimhood, institutional responses, and shared social contexts interact to shape perceptions of wildlife and conservation.

In this study, we address this gap by comparing households directly affected by tiger attacks with neighbouring non-victim households within the same villages in the TATR buffer zone. Using semi-structured interviews, we examine how direct experience of harm intersects with shared ecological conditions, governance systems, and community norms. Specifically, we aim to compare perceptions of tiger presence and conservation institutions, assess satisfaction with mitigation measures such as *ex gratia* payments after a human injury or death and translocations, and document expectations regarding safety, recognition, and accountability.

By focusing on variation within villages rather than treating communities as homogeneous units, this study contributes to scholarship that theorizes human-wildlife coexistence as socially situated and governance-mediated (Jolly & Stronza, 2025; Moon, 2025). Rather than framing victims and non-victims as opposing categories, we explore how shared histories, institutional practices, and uneven exposure to risk shape overlapping but distinct perspectives on living with tigers. In doing so, this article seeks to inform more responsive and just conservation approaches that acknowledge lived experience while remaining attentive to broader questions of governance and responsibility.

## 2 | METHODS

### 2.1 | Study area

The Tadoba-Andhari Tiger Reserve (TATR), located in the Chandrapur district of Maharashtra (Figure 1), encompasses 1727 km<sup>2</sup>, comprising a 625 km<sup>2</sup> core zone and a 1102 km<sup>2</sup> multi-use buffer zone, and forms part of the Central Indian Landscape (Habib, 2019). The buffer zone is home to more than 23,000 families in over 90 villages. Residents are predominantly Gond, a Scheduled Tribe (ST) community, alongside Other Backward Castes (OBC), Scheduled Castes (SC), and Nomadic Tribes (NT). These are constitutionally and administratively recognized social categories in India associated with historical disadvantage and differential access to land, livelihoods, and state support. Livelihoods depend on rain-fed agriculture, wage labour, livestock rearing, subsistence fishing and collection of non-timber forest products (NTFP), resulting in daily exposure to forest spaces used by tigers (Nagendra et al., 2006).

Local understandings of living with tigers are shaped by long-standing cultural and spiritual frameworks. Many communities, particularly the Gonds, venerate Waghoba, a big-cat deity associated with protection and moral regulation of human-animal relations. Shrines are located at village entrances, forest edges, and sites of fatal tiger attacks, where rituals seek protection, honour the deceased, and sustain harmony between people and tigers

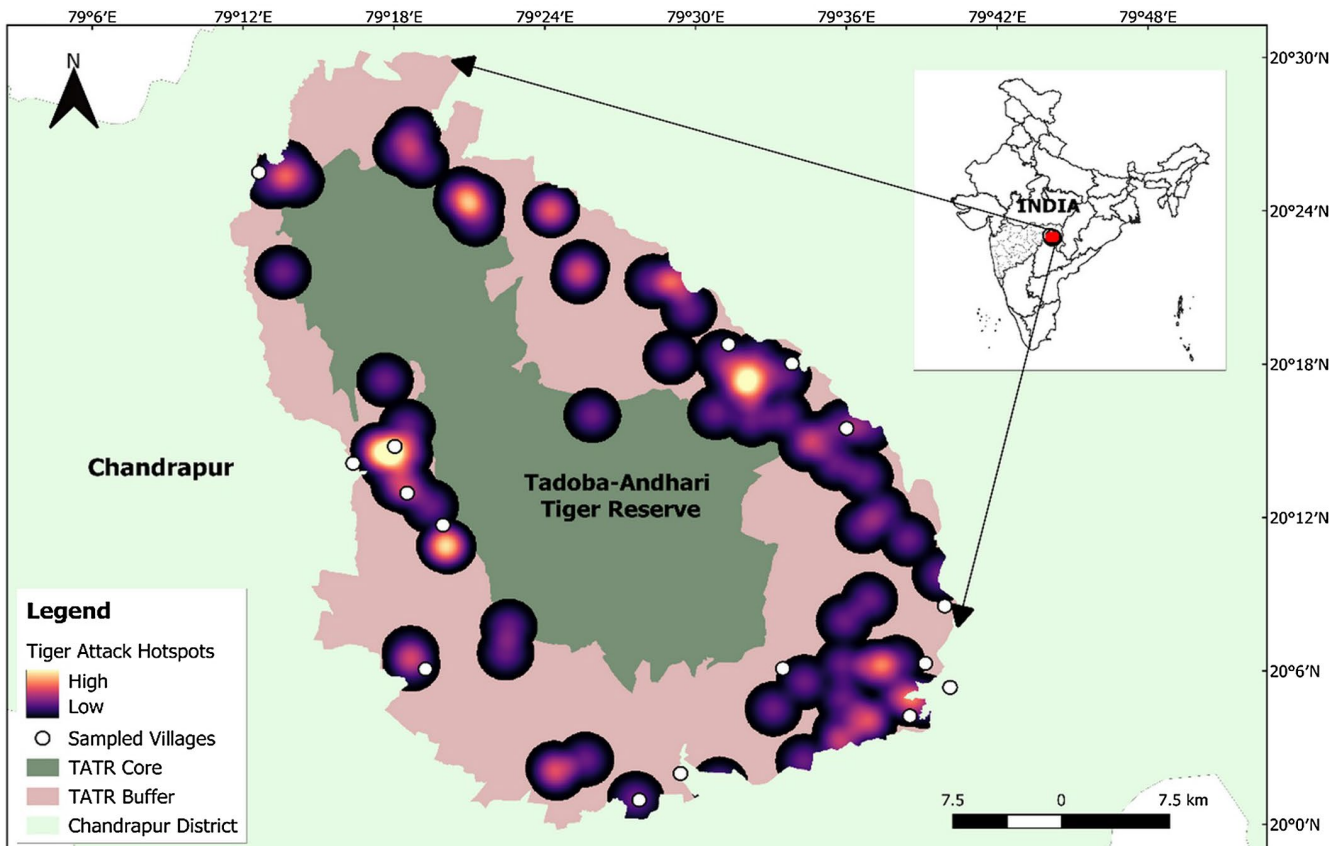


FIGURE 1 Sampled villages overlaid on the heat map of tiger attacks on people in TATR buffer zone.

(Shaikh, 2024). These practices reflect locally grounded ways of understanding tigers not only as dangerous animals but as sentient beings embedded in social and moral worlds.

TATR has a long history of state control, beginning as a Reserved Forest for timber extraction under colonial rule and later designated as a national park. After decades of hunting and habitat degradation had reduced tiger numbers to 34 in 2006 (Jhala et al., 2008), intensified conservation measures spurred a strong recovery, with 97 individuals recorded in 2022 (Qureshi et al., 2023). This resurgence has seen tigers increasingly occupy both protected and non-protected forest fragments in the adjoining territorial divisions of Chandrapur, Central Chanda, and Bramhapuri, where agricultural fields and human settlements contribute to frequent human–tiger encounters (Qureshi et al., 2023).

Mitigation efforts in the region include ex gratia compensation provided by the Maharashtra Forest Department for human fatalities (INR 25 lakhs ≈ \$1775), injuries, and livestock losses caused by wildlife (Government of Maharashtra, 2024). While safari tourism has expanded, activities are concentrated around a few entry points, generating uneven benefits across villages. Governance in the buffer zone involves Joint Forest Management Committees, Eco-Development Committees, Gram Sabhas, and the State Forest Department, though their effectiveness and inclusivity in decision-making vary and are often contested by local residents. Together, these ecological, socio-cultural, and institutional dynamics make TATR's buffer zone a critical site for examining lived experiences of coexistence, risk, and governance.

## 2.2 | Study design

We conducted semi-structured interviews over 6 months (November 2024–April 2025). Using purposive sampling, we selected 16 villages within the TATR buffer zone, prioritizing locations with documented tiger attacks (based on Maharashtra Forest Department records, corroborated by local staff and residents) and capturing variation in exposure, livelihood types, and geographic location.

A total of 50 interviews were conducted with rural residents, grouped into two categories:

1. **Victims:** Individuals who had personally experienced a tiger attack (e.g. injury, or the fatality of an immediate family member). Introductions were facilitated by local informants and village councils, ensuring sensitivity and trust.
2. **Non-victims:** Individuals residing in the same villages but with no direct experience of tiger attacks. Within each village, non-victims were purposively selected to enable comparison under shared ecological and governance conditions (village, conservation regimes, compensation schemes), while not seeking socio-economic matching. As a result, differences in gender, caste composition, livestock ownership, and income distribution reflect existing intra-village inequalities rather than sampling controls.

## 2.3 | Data collection

We conducted interviews in Marathi with assistance from a trained local field assistant. Interviews lasted 15–60 min and were conducted in participants' homes or shared village spaces. We used visual aids (picture cards of tiger and its prey species) to facilitate discussions. Sensitive topics such as attacks or loss were not directly solicited and were discussed only when raised by participants to minimize distress and framing bias.

The interview guide (Supporting Information: [Appendix 1](#)) covered:

- Experiences and perceptions of tiger presence and risk
- Changes in forest access and livelihood practices
- Safety strategies and behavioural adaptations
- Sentiments towards sharing space with tigers
- Views on compensation, mitigation, and institutional response
- Expectations regarding responsibility, accountability, and protection

Written informed consent was obtained prior to each interview, including permission for audio-recording.

Given ethical and contextual constraints, interviews were documented using a combination of audio recordings, detailed field notes, and expanded summaries. Field notes were taken during and immediately after interviews to capture key narratives, contextual details, and non-verbal cues. Socio-economic attributes and close-ended perception responses were extracted and tabulated descriptively.

## 2.4 | Ethical standards

Ethical approval was obtained from the Research Ethics Committee of the Nature Conservation Foundation, Mysore, India (EC Number–NCF-EC-26/02/2025-(97)) (Supporting Information: [Appendix 2](#)).

## 2.5 | Data analysis

We adopted a qualitatively driven mixed-methods analytical approach, using descriptive quantitative trends to contextualize qualitative insights from interviews (Buckley, 2018). The study included 50 participants: victims of tiger attacks ( $n=25$ ) and non-victims ( $n=25$ ).

Maharashtra Forest Department records (2014–2024) were summarized to examine temporal, seasonal, and spatial patterns in tiger attacks. Descriptive socio-economic information was used to situate participant narratives. No inferential statistical analyses were conducted.

Qualitative data were drawn from field notes and expanded summaries of audio recordings. Full transcriptions were not undertaken; instead, recordings were converted into expanded summaries and reviewed with the local assistant to ensure cultural and linguistic accuracy.

AS conducted manual coding and refined through iterative feedback from the assistant. While formal intercoder reliability checks were not conducted, repeated comparison across interviews ensured consistency in coding and theme development. Codes were clustered into broader themes including livelihood disruption, emotional responses to risk, perceptions of institutional response, and expectations of recognition and accountability.

Quantitative summaries were read alongside qualitative material, allowing demographic and spatial trends to inform interpretation and participant accounts to explain observed patterns. Figures anchor the reader in these patterns, while quotations illustrate lived experience.

## 2.6 | Positionality

AS and KS are native Marathi speakers from Maharashtra but are not residents of Chandrapur nor members of the communities studied. AS is an early-career and KS is a mid-career wildlife researcher. Our prior research experience in TATR and adjoining territorial divisions facilitated access, familiarity with forest department procedures, and contextual understanding of local conservation narratives. This background informed our interpretation of participant accounts,

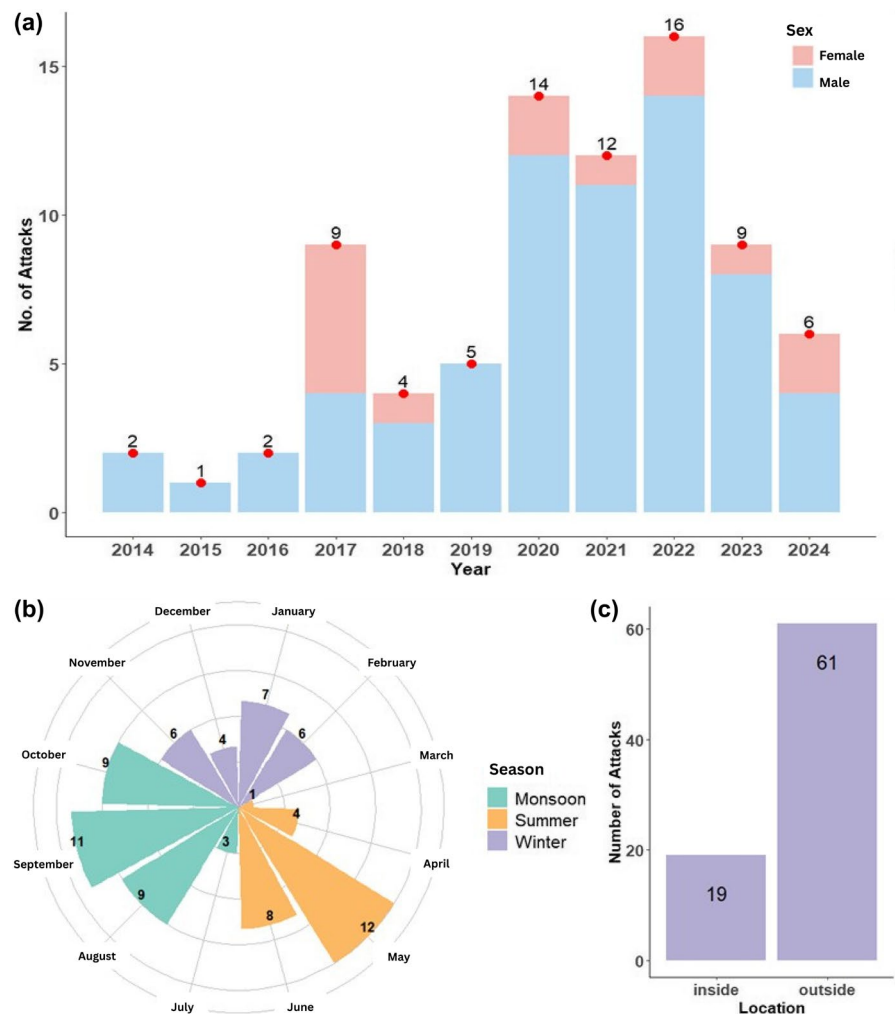
particularly in relating individual experiences to broader governance processes.

At the same time, differences in socio-economic background and academic training may have shaped how risk, authority, and loss were interpreted, potentially foregrounding institutional dimensions over everyday moral or spiritual framings. Gender dynamics shaped participation and narration during interviews. Men were more likely to speak at length, while women often hesitated due to local social and cultural norms. We remain attentive to these dynamics and have sought to interpret accounts conservatively, grounding analysis closely in participant narratives.

## 3 | RESULTS

### 3.1 | A decade of rising risk: Temporal, spatial, and social patterns of tiger attacks

Between 2014 and 2024, 80 tiger attacks on people were recorded in the buffer zone of TATR. Annual incidents rose steadily from just two in 2014 to 16 in 2022, with a clear upward trend (Figure 2a). This rise aligns with participants' perceptions of a growing tiger



**FIGURE 2** (a) Annual number of attacks, disaggregated by victim gender; (b) Monthly distribution of attacks plotted by season (Summer: March–May, Monsoon: June–September, Winter: October–February); (c) Number of tiger attacks that occurred inside or outside the PA forest ( $n=80$ ).

population and increased tiger movement into human use areas such as agricultural fields and village edges.

Attack frequency varied across the year. Incidents peaked in August (Figure 2b), followed by May and September, months that overlap with the monsoon and early harvest seasons. During this time, tall vegetation and scrubs may reduce visibility, and farming activity tends to increase, raising the likelihood of human–tiger encounters. Majority of the attacks occurred outside forest edges of the park while working in their agricultural fields or grazing cattle (Figure 2c).

The mean age of victims was 48.6 years and the majority of victims were male (82.5%). Most were between 40 and 55 years old, a group likely to be actively engaged in livelihood activities such as tending the fields, cultivation, NTFP collection, or livestock herding. This gender and age pattern may reflect labour roles in the region, where older men more frequently perform tasks that involve proximity to forested areas.

Caste-wise, 57.5% of victims were from Scheduled Tribes (STs) and 28.7% from Other Backward Classes (OBCs). While this distribution aligns with the predominantly tribal population of TATR's buffer zone, it also reflects a landscape where forest-adjacent communities often engage in occupations that require daily exposure to forest or field edges. These patterns suggest that social and occupational location, rather than caste status alone, may play a role in structuring exposure to tiger presence.

Majority of the attacks (76.2%) occurred outside the forest boundary, including in agricultural fields, along local roads, or at the village periphery. Only 23.8% took place inside the forest itself. This distribution aligns with resident accounts of increased tiger activity in shared spaces and underscores the challenges of managing conflict in landscapes where the human–wildlife boundary is highly permeable.

### 3.2 | Socio-demographic profile of interview participants

We interviewed 50 individuals from 16 villages located in the buffer zone of the TATR, with an equal number of tiger attack victims and non-victims. Interview participants reflected the broader profile of rural buffer zone communities, where economic dependence on land, limited education, and caste-based marginalization intersect with exposure to tiger presence. Most participants were men (72%) between the ages of 40 and 55 (46%), and nearly half identified as members of Scheduled Tribes (48%). The majority reported an annual household income in the 1–3 lakh INR range (58%) (Table 1).

### 3.3 | Livelihoods

Across TATR's buffer villages, livelihood strategies are increasingly shaped not by choice, but by perceived safety. In a landscape where tigers move freely between protected and human-dominated spaces, no livelihood activity remains unaffected, whether in the forest, fields, or lakes.

**TABLE 1** Socio-economic and cultural characteristics of the interview participants in TATR (N = 50).

Characteristics	Victims (N = 25)	Non-victims (N = 25)
Age (<40; 40–55; >55) (%)	24; 44; 32	8; 48; 44
Gender (Female; Male) (%)	40; 60	16; 84
Caste (ST; OBC; SBC; SC) (%)	36; 44; 12; 8	60; 36; 4; 0
Education (≤10th; ≥12th) (%)	76; 24	88; 12
Median annual household income	₹1.5 lakh (≈\$1700)	₹1.575 lakh (≈\$1775)
Income distribution (<1 lakh; 1–3 lakhs; 3–5 lakhs; >5 lakhs) (%)	8; 80; 12; 0	32; 36; 28; 4
Farmland ownership (% households)	80	80
Livestock ownership (% households)	48	68
Waghoba worship (% households)	64	48

Note: Income reported as annual household income in Indian Rupees (INR).

Abbreviations: OBC, Other Backward Castes; SBC, Special Backward Classes; SC, Scheduled Castes; ST, Scheduled Tribes.

'There is no safe work left', said a villager. 'Whether we are in the field, the forest, or the road, the tiger can be anywhere'.

This sense of occupational siege, where no landscape or activity is perceived as safe, has reshaped local livelihoods. Activities once considered routine, from crop harvesting to firewood collection, are now fraught with risk. Even lakes, traditionally seen as shared and open spaces, have become sites of fear.

A young man from a traditional fishing community in the same village explained: 'We used to fish early in the morning. Now we often see tigers in the water. A woman was mauled near the lake last year. So, we stopped fishing. I now leave before sunrise to find wage work in Chandrapur, nearly 100 kilometres away and even then, there's no guarantee I'll find any'.

Such accounts point not only to economic disruption, but to the erosion of everyday roles, such as farming, fishing, and forest work, through which people previously structured daily routine and livelihoods.

A comparison of total annual household income between victims and non-victims reveals important differences in economic distribution (Figure 3a). While the median income is comparable across groups, approximately ₹1.5 lakh (≈\$1700) per year, non-victim households display greater variability and a wider income range, with several reporting earnings above ₹5 lakh (≈\$5676). In contrast, victim households show a more compressed distribution, with most incomes concentrated between ₹1 lakh (≈\$1125) and ₹2.5 lakh (≈\$2838), and fewer high-income outliers.

Agriculture and wage labour remain central for most households. Victim households reported lower income from NTFP collection and slightly higher reliance on wage labour (Figure 3b).

Fewer than 5% reported any tourism-related income, and those who did described it as seasonal and inconsistent

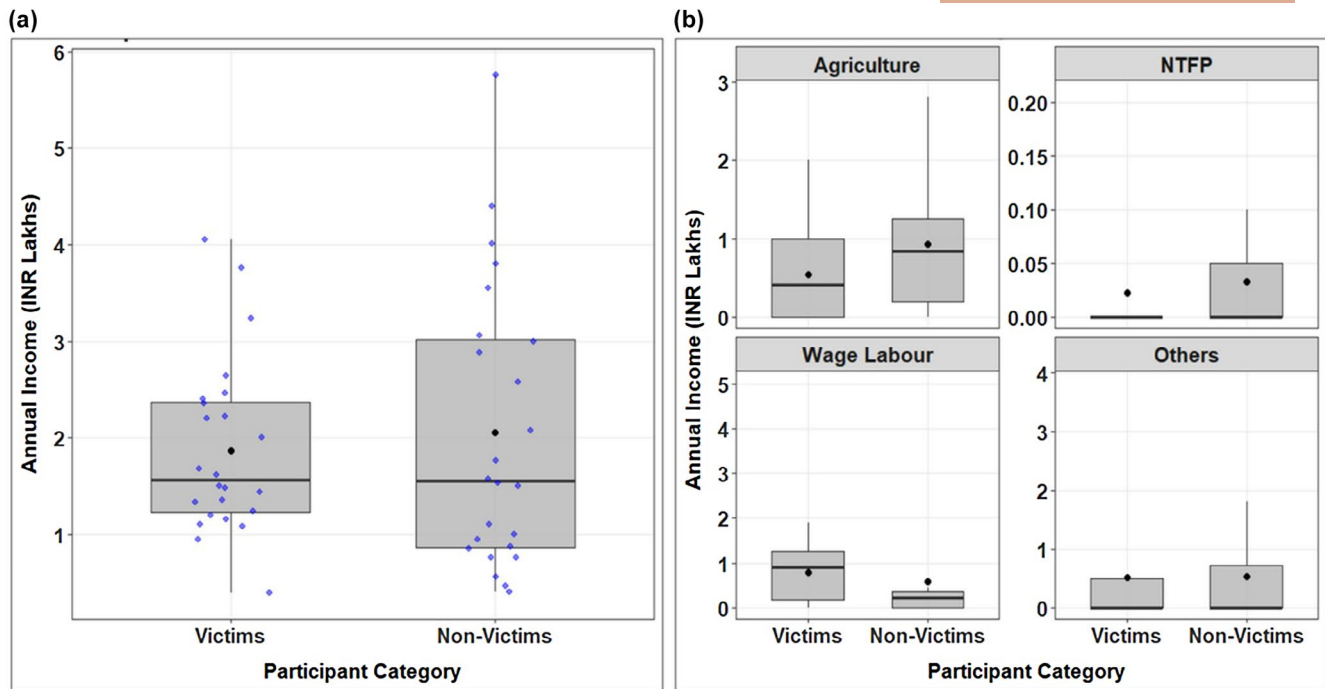


FIGURE 3 (a) Annual household income among conflict victims and non-victims; (b) Source-wise annual income breakdown for victims and non-victims.

'Tourism is not for us', said a farmer, 'Maybe five or six families in each village get work in resorts or as guides. What do the rest of us get? Just tourists passing by our damaged fields'.

Another farmer added 'If a tiger kills our cow, it takes ages for us to get a paltry amount as compensation. But the same tiger brings lakhs to the safari gate'.

This deep sense of exclusion, of bearing the costs of conservation while being denied its benefits, was present across the sample but was most acute among those directly affected by conflict.

Together, these patterns point to a landscape where livelihoods are no longer merely vulnerable, but increasingly precarious. As tiger movement extends beyond forest boundaries, traditional livelihoods are being abandoned, while alternatives remain uncertain and economically fragile, often limited to short-term wage labour or the extraction and sale of forest produce such as fuelwood and NTFP. This gradual erosion of livelihood security reflects a widening disconnect between conservation priorities and rural survival.

### 3.4 | Encounter frequency and perceptions

Among victims, 76% reported monthly encounters, compared with 48% of non-victims. Non-victims were more likely to report occasional or rare encounters, including biannual (32%) and annual/never (20%) frequencies.

All participants claimed to have observed an increase in the tiger population in their areas in the past decade. They attributed the rise in tiger numbers to a range of ecological and management-related factors (Figure 4a). The most frequently cited cause was the protected status of the TATR, reported by all victims and 80% of non-victims. Many framed protection as one-sided, favouring animals over people. As one victim explained: 'Since the forest became protected, we are not allowed to enter without permission, not even to collect firewood. But the tigers come into our fields, our villages. They are protected; we are not'.

Translocation of tigers into the landscape was the next most commonly perceived cause (84% victims, 76% non-victims). Multiple respondents believed that tiger translocations into the reserve were strategic deterrents, intended to keep people out of forest spaces they had historically used. One participant remarked: 'These tigers are not from here. They [the Forest Department] have brought them from other places, like zoos or other forests. There used to be one or two, now there are many'.

Another important factor perceived for the increased tiger population was high fecundity (62% victims, 66% non-victims). This explanation was often grounded in direct observation or tiger safari updates. As one respondent noted: 'They breed every year. Earlier they would have two or three cubs, and maybe one would survive. Now one tigress has four, sometimes even five cubs, and they all survive. The department has created waterholes for them. They are basically rearing these tigers as domestic animals'.

Participants offered a variety of explanations for why tiger attacks on people have increased in recent years (Figure 4b). The most

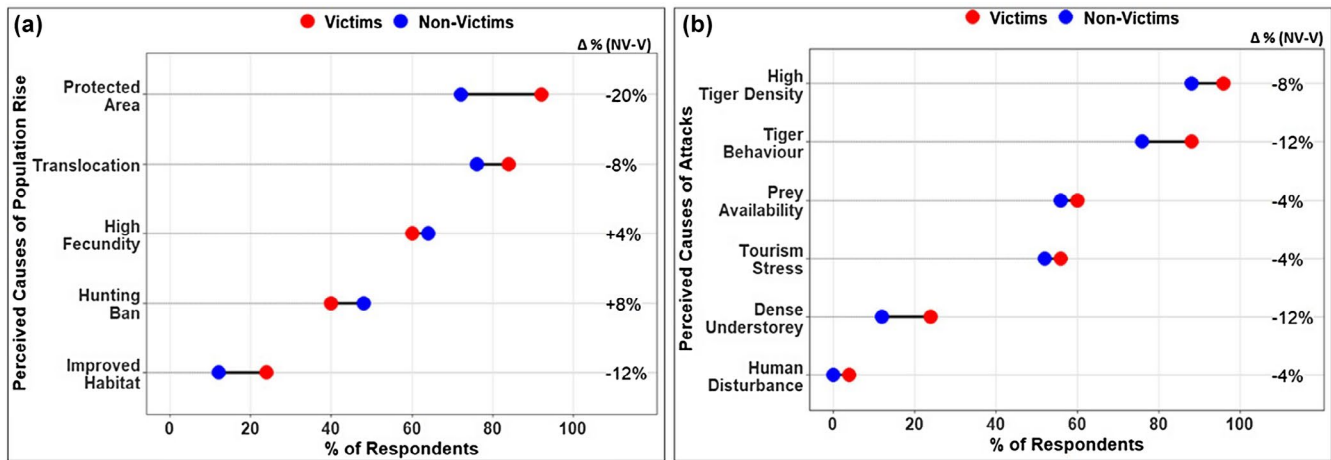


FIGURE 4 (a) Perceived causes of increase in TATR's tiger population; (b) Perceived causes of increase in tiger attacks on people in TATR.

frequently cited reason was high tiger density, reported by nearly all respondents in both groups (92% victims, 84% non-victims). Many expressed the view that tiger numbers had exceeded a safe or manageable level. As one respondent put it: 'Tiger population has increased but the forest size is the same. They don't have enough space or food inside, so they come outside and encounters with people increases'.

Change in tiger behaviour was the second most commonly mentioned cause (88% victims, 76% non-victims). Respondents linked this behaviour change to two factors: translocations and tourism. One victim shared: 'These tigers are not like the old ones. These are new tigers or they have become too bold because of tourism and exposure to humans. They come out during the day, sit in our fields, and don't get scared. They don't avoid people anymore, and that is what makes them dangerous'. This explanation often reflected fear and unpredictability.

Respondents also cited a decline in prey availability as a contributing factor (64% victims, 60% non-victims). Several described tigers coming out of the forest in search of food. As one participant explained: 'There are not enough animals inside for tigers to eat, hence they come for our cattle. If people try to chase them away, they get attacked'.

Tourism-related stress was mentioned by 60% of victims and 56% of non-victims. This was usually framed as a source of disturbance that altered tiger movement patterns. A respondent observed: 'So many jeeps go into the forest every day. The tigers get disturbed and come out at odd hours. They seem to live more outside the forests than inside. We see them more near the roads now than before'. He himself was engaged in tourism-related activities.

### 3.5 | Comparative affective and normative responses towards tigers

Participants expressed a range of affective and normative responses towards tigers and their management, which were coded into seven categories: Fear, Frustration, Retaliation, Population Management, Spiritual Association, Empathy, and Reverence. These categories capture both emotional responses and positions towards tiger

governance, and were expressed across both victims and non-victims, though their articulation reflected different lived experiences rather than clearly distinct group positions (Figure 5).

Fear was near-universal among participants across both groups. Among victims, fear was grounded in direct experience of injury, loss, or fatal attack and was expressed through references to restricted mobility and constant anxiety over personal safety or livestock loss. Among non-victims, fear was shaped more by indirect exposure, including proximity to affected households or community narratives of risk.

A distinguishing feature among victims was the prominence of frustration, directed towards the forest department rather than towards tigers themselves. Participants perceived the department as prioritizing wildlife over human safety. One respondent remarked, referring to the forest department: 'They worry more about the tiger and not us'. These responses expressed dissatisfaction with governance and concerns about protection and accountability.

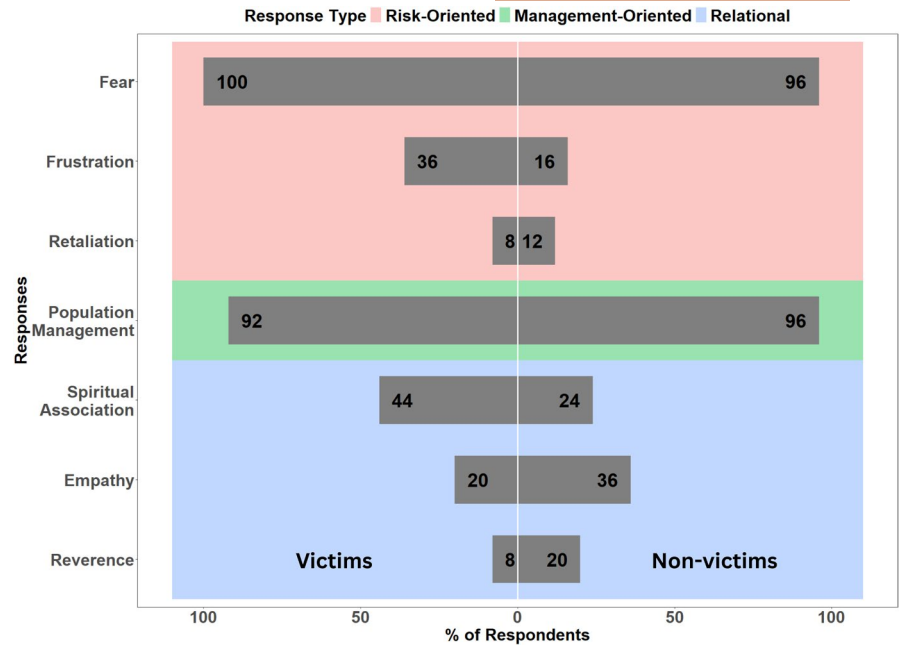
Retaliatory responses, although expressed by a minority of participants, reflected calls for lethal action against tigers perceived as posing an immediate threat. Such responses were often articulated alongside fear, frustration, or demands for intervention rather than as standalone positions.

In contrast, calls for tiger population management were widespread across both groups. Participants emphasized interventions such as relocation aimed at reducing risk while maintaining tiger presence in the landscape. A deceased victim's wife explained: 'There are just too many in our area. The numbers need to be managed. We're not saying kill them, but move them deeper into the forest'.

Spiritual association added another dimension to local responses towards tigers. Many participants referred to Waghoba, a local tiger deity, as a spiritual and cultural reference shaping their relationship with tigers, particularly following fatal attacks. Waghoba shrines were commonly erected after such incidents, though respondents emphasized that these practices were largely token gestures rather than expressions of active belief. Waghoba was widely characterized as no longer central to everyday community life.

One respondent, a tribal farmer and safari guide, noted that such relational values, understood here as everyday norms guiding

**FIGURE 5** Distribution of affective and normative responses towards tigers among victims and non-victims.



how people live alongside and interpret tiger presence, had weakened following the formation of the reserve, the expansion of tourism, and the increasing frequency of livestock loss and human fatalities. As he explained, 'Earlier these customs were made to keep peace with the forest and the wild animals. They reminded people to respect tigers and not harm them, even if they caused occasional loss. Now things have changed. Tourism, the park restrictions, and so much sangharsh (conflict), these old systems don't work anymore. People do the rituals because it is tradition, but it doesn't mean they believe it will protect them'. Respondents also noted that tourism staff often narrate Waghoba stories to visitors as a way to capture interest, even when they themselves do not subscribe to these beliefs.

Empathy and reverence were articulated across both groups and reflected relational responses to tigers grounded in ecological understanding. Empathy was expressed through recognition of tiger behaviour and habitat needs, often situating encounters within broader processes of forest loss and environmental change. One Gond respondent stated: 'Like we need space, they also need space to survive. It's not the tiger's fault if it comes close, its forest is shrinking'. Reverence was expressed through appreciation of the tiger's ecological role in maintaining forest balance and limiting crop damage from wild herbivores.

### 3.6 | Discontent with ex gratia payments

The ex gratia scheme, intended to support families affected by tiger attacks, was met with overwhelming dissatisfaction, particularly among victims. Ninety-two percent of victims and 64% of non-victims expressed negative views (Figure 6a). This discontent extended beyond bureaucratic delays or procedural inefficiencies; it reflected a deeper crisis of trust, ethics, and justice.

For many, compensation was seen as a symbolic gesture designed to manage public pressure rather than address the root causes of the increasing attacks. A deceased victim's mother expressed, 'We are not asking for money. We are asking to live without fear. But when someone is killed, they [forest department] give us money like that solves everything. That money doesn't bring the dead back. It doesn't stop the next attack'.

Several participants were troubled by what they saw as the commodification of human life, pointing to the annual increase in compensation amounts as indicative of a transactional logic: 'Earlier it was 15 lakhs, now it's 25 lakhs. Will they keep increasing the money? If we die, there's a price? Let us then kill one of their tigers and offer them money. Will they [forest department] accept that?' said an elderly farmer. Although he had not experienced a tiger encounter himself, he voiced growing concern over how the tiger situation was unfolding in TATR. This statement reflected not a call to violence, but a raw expression of frustration over perceived double standards in whose lives are valued.

Among non-victims, neutral or indifferent views often stemmed from limited awareness of the scheme, highlighting gaps in communication and outreach:

Taken together, these responses suggest that ex gratia payment is perceived less as meaningful support and more as a token response to a systemic failure, a way to assign monetary value to lives without addressing the conditions that lead to loss in the first place.

### 3.7 | What people want: Concrete demands for safety

Participants voiced clear and urgent preferences for tiger attack prevention. Their recommendations reveal a desire for physical protection, proactive action, and visible accountability.

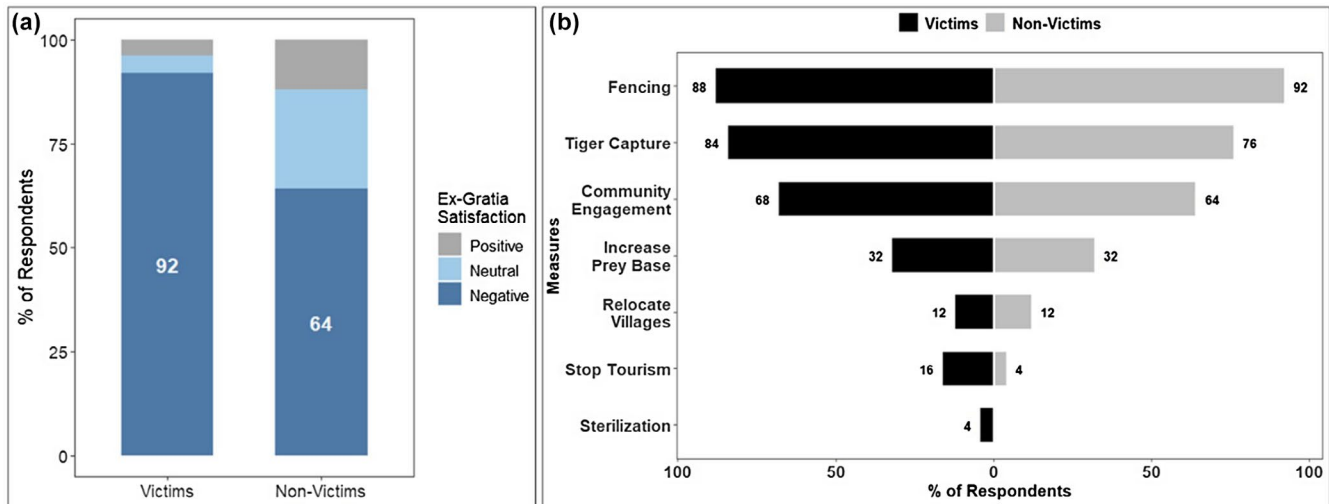


FIGURE 6 (a) Levels of satisfaction with the ex gratia policy; (b) Management recommendations emerging from an open-ended question.

The most widely supported management measure was chain-linked fencing (Figure 6b), extending 2 feet below ground and 6 feet above, endorsed by 88% of victims and 92% of non-victims. An elderly farmer and his wife said 'We are not allowed to go inside the forest because the forest belongs to the tigers. But now their tigers come to our fields. Give us a strong fencing so that not just tigers but even the herbivores won't come inside and destroy our crops. They [forest department] have provided solar powered fencing to a few farmers but they don't work most of the time'.

The second most cited recommendation was capturing specific tigers known to attack, with 84% of victims and 76% of non-victims in favour. More than half of the respondents advocated for more proactive community engagement where the people get a chance to voice their opinions.

Ecological or relocation-based solutions, such as increasing prey base, relocating high attack-prone villages, or tiger sterilization were mentioned by few respondents.

Some participants (victims-16%, non-victims-4%), particularly those near tourism zones, expressed strong frustration with the tourism boom in TATR and viewed it as a major driver of escalating challenges for local communities. A farmer said, 'We can't enter the forest because we are called a disturbance to the tigers. But clearing forests for resorts, hundreds of vehicles, and tourists shouting all day, that's not a disturbance. Tigers will keep coming out and attacking people unless this kind of tourism stops'.

## 4 | DISCUSSION

Across villages, victim and non-victim households articulated similar cultural and normative narratives about tigers, including acceptance of their presence, recognition of ecological importance, and an expectation that people must adjust their lives in protected landscapes. These shared narratives, however, masked pronounced differences in everyday experience. Households that

had experienced attacks reported more frequent encounters, sustained restrictions on mobility, altered livelihood practices, and ongoing fear, whereas non-victim households more often described coexistence as requiring caution rather than continuous disruption. Coexistence in Tadoba is thus differentiated less by attitudes than by uneven exposure to risk and its cumulative consequences.

This intra-differentiation is a central empirical contribution of the study. It shows that aggregated measures of tolerance or acceptance can misrepresent how coexistence is sustained: under the same governance arrangements, households may endorse coexistence in principle while bearing its costs in markedly unequal ways. Holding ecological context and institutional rules constant reveals that coexistence can persist through uneven endurance rather than shared benefit or negotiated compromise.

While victim and non-victim households were subject to the same conservation rules and ecological conditions, they were not socio-economically identical. Differences in caste composition, livestock ownership, and income reflect pre-existing intra-village inequalities; our analysis therefore examines how direct experience of harm interacts with these conditions, rather than treating victimhood as an isolated cause.

### 4.1 | Intra-village differentiation and the limits of relational coexistence framings

Recent coexistence scholarship has reframed human–carnivore relations as dynamic and socially negotiated, emphasizing processes of adjustment, learning, and accommodation rather than fixed states of conflict or tolerance (Carter & Linnell, 2016; Pooley, 2021). This shift has been important in situating coexistence as a social condition shaped by institutions and histories rather than as an attitudinal outcome. However, our findings show that the scope for such negotiation is unevenly distributed even within the same village.

In the Tadoba buffer zone, households located near forest edges, agricultural interfaces, and habitual tiger movement corridors experienced repeated encounters and higher attack risk, a pattern evident in both official incident records and participants' accounts. These households described ongoing adaptations to risk, including avoiding fields at certain times, escorting children to school, abandoning forest- or river-based activities, and reorganizing daily routines around anticipated encounters. These were not temporary responses to isolated events but persistent constraints on everyday life. By contrast, non-victim households in the same villages were generally aware of tiger presence but more often framed coexistence as requiring attentiveness or precaution rather than sustained disruption.

Crucially, this differentiation was not accompanied by fundamentally different beliefs about tigers or conservation. Victim and non-victim households articulated similar narratives of acceptance, ecological value, and moral obligation to adjust. What differed was not how coexistence was understood, but how it was lived. This disjuncture highlights a key limitation of relational coexistence framings at aggregated scales: shared narratives of adjustment can coexist with sharply unequal material experiences of fear, loss, and constraint.

Rather than contradicting relational approaches, these findings refine them by showing that coexistence negotiations unfold within structurally uneven conditions. Where exposure to harm is spatially fixed and livelihood mobility is limited, coexistence functions less as a collectively negotiated process than as an unequal condition shaped by location, infrastructure, and governance. Similar dynamics have been documented in other carnivore landscapes, where community-level tolerance masks the concentration of loss and adaptation among a small subset of households (Alba-Patiño et al., 2025; Braczkowski et al., 2023). Together, these findings demonstrate that coexistence can be socially affirmed at the village scale while being borne unevenly at the household scale, with important implications for how coexistence is conceptualized, measured, and governed.

## 4.2 | Compulsory co-presence in protected area buffer zones

Our findings complicate narratives of a transition from fortress conservation towards coexistence-based models (Bontempi et al., 2023; Sillero & Laurenson, 2001). In the Tadoba buffer zone, coexistence operates less as a negotiated arrangement and more as a condition shaped by limited alternatives within a landscape structured by legal restrictions, livelihood immobility, and high carnivore density. Households did not describe actively choosing to live with tigers or shaping the terms of coexistence; instead, they emphasized the absence of viable options.

Victim households, in particular, reported that relocation or substantial land-use change was infeasible without jeopardizing subsistence or violating conservation rules. Avoidance of high-risk spaces was rarely possible, as most attacks occurred not in forest

interiors but in agricultural fields, village edges, and everyday workspaces. Risk was thus produced within shared human-tiger spaces rather than at the margins of protected areas. Buffer zones, often presented as integrative landscapes, functioned instead as areas where exposure to harm is intensified while decision-making power remains limited.

This configuration aligns with political ecology analyses showing that protected area conservation often redistributes risk downward onto local residents while centralizing authority within state and conservation institutions (Margulies & Karanth, 2018; Massé, 2016). Tadoba therefore reflects a hybrid governance form: coexistence in discourse, coupled with fortress-like constraints in practice. The language of coexistence masks the uneven distribution of choice and exposure documented within villages, reinforcing the intra-village inequalities identified in this study.

## 4.3 | Governing loss: Compensation, legitimacy, and unequal recognition

Compensation payments emerged as the most visible institutional response to tiger attacks, yet our findings show that they functioned less as mechanisms of redress than as symbolic acknowledgements of loss. Dissatisfaction was particularly pronounced among victim households, who emphasized delays, undervaluation, and the inability of lump-sum payments to compensate for lost labour, disrupted social roles, or enduring insecurity.

Importantly, dissatisfaction was not limited to administrative inefficiency. Compensation reshaped perceptions of justice and legitimacy by translating death and injury into standardized monetary values without addressing the spatial and livelihood conditions that produced continued exposure to risk. This echoes findings from elsewhere in South Asia, where compensation schemes fail to build trust unless they are timely, predictable, and embedded in broader forms of material and social support (Karanth et al., 2018; Ravenelle & Nyhus, 2017). By contrast, evidence from Sweden and Italy indicates that compensation can reduce conflict when it is rapidly verified, coupled with preventive measures, and designed to limit repeated loss: performance-based payments tied to verified wolverine reproduction reduced illegal killing in Sweden (Persson et al., 2015), while in Italy compensation improved tolerance mainly where losses were infrequent and prevention was participatory, but failed for chronically affected herders (Dalmasso et al., 2011).

Our results show that compensation is experienced as hollow where exposure to tiger encounters is concentrated among a few households. Repeated claims turn compensation from exceptional relief into a routine bureaucratic response to ongoing harm, eroding its moral force as payments neither reduce vulnerability nor alter the conditions that sustain risk. In this way, compensation stabilizes institutional claims of responsiveness while leaving underlying inequalities intact, reflecting broader critiques of conservation governance that prioritizes administrative coherence over substantive redistribution of risk (Moon, 2025; Shackleton et al., 2023).

#### 4.4 | Culture, reverence, and differentiated meaning-making

Cultural institutions associated with large carnivores, including Waghoba worship among communities in Maharashtra, have been described as shaping moral interpretations of risk, reciprocity, and responsibility in shared landscapes, and in some contexts as facilitating acceptance of continued coexistence with big cats (Ghosal & Kjosavik, 2015; Nair et al., 2021). Our findings do not reject this interpretation, but they show that shared cultural repertoires do not produce uniform meanings or effects under conditions of uneven and repeated harm.

Ritual practices were widely reported across both victim and non-victim households, yet respondents frequently described them as commemorative or socially obligatory rather than protective. Rather than mitigating fear or uncertainty, ritual observance often functioned as a way of acknowledging loss after the fact. Similar ambivalence has been noted in ethnographic accounts of human-carnivore relations, where reverence coexists with anxiety and grief rather than resolving them (Tiedje, 2008). Crucially, variation emerged within the same cultural setting. Some households continued to derive moral meaning and restraint from ritual practice, while others, particularly those experiencing repeated attacks, expressed scepticism about its efficacy. This intra-village differentiation aligns with work showing that cultural meanings around wildlife are internally heterogeneous and shaped by lived exposure to loss rather than shared belief alone (Bhatia et al., 2021; Thekaekara et al., 2021). Together, these findings caution against treating culture as a substitute for material security or institutional accountability. In Tadoba, cultural practices remain socially significant, but their capacity to sustain coexistence is uneven and contingent, reflecting the unequal distribution of risk documented in this study.

#### 4.5 | Reframing coexistence governance

Taken together, our findings indicate that coexistence in the Tadoba landscape is governed less through sustained reductions in everyday risk than through the institutional management of endurance. Coexistence persists not because exposure to harm has been meaningfully alleviated, but because a subset of households repeatedly absorbs its consequences over time, with little capacity to alter the structural conditions that produce vulnerability.

This reframing shifts analytical attention away from whether coexistence is locally endorsed and toward how it is produced and stabilized through governance. Recent scholarship emphasizes that coexistence is not simply an outcome of tolerance, attitudes, or cultural values, but a governance arrangement shaped by how responsibility, authority, and risk are distributed across households, communities, and institutions (Jolly & Stronza, 2025; Pooley, 2021). Conservation governance can acknowledge power while leaving the mechanisms through which it is enacted and reproduced largely uninterrogated, allowing systems to appear responsive without altering

underlying inequalities (Moon, 2025). Our findings extend this critique by showing how, under conditions of spatially concentrated risk and limited livelihood mobility, coexistence can be maintained through the normalization of unequal exposure rather than through its reduction.

In Tadoba, governance does not hinge on explicit consent or negotiated compromise. Instead, it operates by narrowing alternatives: relocation is infeasible, livelihood change is constrained by regulation and ecology, and avoidance of risk is limited by the embedding of tiger presence within everyday workspaces. This pattern aligns with broader political ecology analyses showing that conservation authority, while constrained at aggregate political scales, is often comparatively strong in localized rural contexts where affected households have limited scope to contest conservation arrangements (Margulies & Karanth, 2018; Sandbrook, 2017). Endurance thus becomes an implicit condition of coexistence, particularly for households repeatedly exposed to harm.

Institutional responses to loss illustrate how this endurance-based governance is stabilized. Compensation schemes and tourism revenues render conservation success visible and administratively legible, while leaving the spatial and livelihood conditions that generate risk largely unchanged. By prioritizing legitimacy and administrative coherence, conservation systems can stabilize governance without transforming the material relations that generate harm (Moon et al., 2025). In Tadoba, these mechanisms do not mitigate vulnerability; they help sustain a coexistence regime in which unequal exposure is normalized and rendered governable.

Understanding coexistence as institutionally governed endurance has direct implications for how conservation success is evaluated. Metrics that prioritize carnivore recovery, spatial expansion, or the absence of retaliation risk obscuring the localized costs through which these outcomes are sustained. Coexistence may therefore succeed administratively and symbolically, even as everyday life for high-risk households becomes increasingly constrained.

## 5 | CONCLUSION

This study shows that coexistence with large carnivores can be sustained under shared ecological and institutional conditions through markedly unequal everyday experiences. In the Tadoba buffer zone, households articulated similar cultural and normative commitments to tiger conservation, yet these commitments masked pronounced intra-village differentiation in exposure to risk, disruption, and loss. By comparing victim and non-victim households within the same villages, we demonstrate that coexistence persists not through shared benefit or negotiated compromise, but through the uneven absorption of harm by a subset of households.

Conceptually, these findings refine prevailing coexistence frameworks by foregrounding endurance as a governance outcome. Rather than treating coexistence primarily as an expression of tolerance, acceptance, or relational adjustment, the Tadoba case shows how coexistence can be institutionally produced by stabilizing unequal

exposure under conditions of limited livelihood mobility and constrained alternatives. This reframing does not displace relational or cultural dimensions of coexistence, but situates them within materially uneven conditions that shape whose coexistence is sustained and at what cost.

These insights have implications for how coexistence is evaluated and governed in high-density carnivore landscapes. Aggregate indicators of success, such as population recovery, spatial expansion, or the absence of overt retaliation, can obscure the localized costs through which these outcomes are maintained. Attending to intravillage differentiation, repeated exposure, and cumulative harm is therefore essential if coexistence is to be understood not only as an ecological or social condition, but as a distributive and institutional one. While grounded in Tadoba, this analysis is relevant to other protected area contexts where coexistence depends on the endurance of those least able to avoid risk.

#### AUTHOR CONTRIBUTIONS

Ashraf Shaikh: Conceptualization, methodology, data curation, data analysis, writing—original draft, writing—review and editing. Kulbhushansingh Suryawanshi: Conceptualization, methodology, writing—review and editing.

#### ACKNOWLEDGEMENTS

We thank the Rufford Small Grants Programme, UK (Grant no. 42383-1) and the Nature Conservation Foundation, Mysuru, India for funding and supporting this work. We are grateful to the local communities of Tadoba Buffer for their participation and guidance throughout the study and Maharashtra State Forest Department for providing forest permits and tiger attack data. D. Dakhre was the local collaborator who supported data collection. We would also like to thank the Lead Editor, Associate Editor and two anonymous reviewers for their feedback.

#### CONFLICT OF INTEREST STATEMENT

None.

#### DATA AVAILABILITY STATEMENT

The qualitative data (interview transcripts and analysis) supporting this study are not publicly available to protect participant anonymity. A detailed qualitative codebook is provided in [Supporting Information \(Appendix 3\)](#). The quantitative dataset is available via Zenodo at: <https://doi.org/10.5281/zenodo.17210696> (Shaikh & Suryawanshi, 2025).

#### ORCID

Ashraf Shaikh  <https://orcid.org/0000-0003-3067-0120>

Kulbhushansingh Suryawanshi  <https://orcid.org/0000-0003-1155-0748>

#### REFERENCES

Agarwal, S., Marathe, A., Ghate, R., Krishnaswamy, J., & Nagendra, H. (2017). Forest protection in Central India: Do differences in

- monitoring by state and local institutions result in diverse social and ecological impacts? *Biodiversity and Conservation*, 26(9), 2047–2066. <https://doi.org/10.1007/s10531-017-1344-6>
- Aiyadurai, A. (2016). 'Tigers are our brothers': Understanding human-nature relations in the Mishmi Hills, Northeast India. *Conservation and Society*, 14(4), 305. <https://doi.org/10.4103/0972-4923.197614>
- Alba-Patiño, D., Martín-López, B., Delibes-Mateos, M., Requena-Mullor, J. M., & Castro, A. J. (2025). Environmental justice gaps in human-wildlife conflict research from a social-ecological systems perspective. *Biological Conservation*, 312, 111515. <https://doi.org/10.1016/j.biocon.2025.111515>
- Bernardi, C. D., Chapron, G., Kaczensky, P., Álvares, F., Andrén, H., Balys, V., Blanco, J. C., Chiriac, S., Čirović, D., Drouet-Hoguet, N., Huber, D., Iliopoulos, Y., Kojola, I., Krofel, M., Kutal, M., Linnell, J. D. C., Skrbinšek, A. M., Männil, P., Marucco, F., ... Boitani, L. (2025). Continuing recovery of wolves in Europe. *PLOS Sustainability and Transformation*, 4(2), e0000158. <https://doi.org/10.1371/journal.pstr.0000158>
- Bhatia, S., Suryawanshi, K., Redpath, S. M., Namgail, S., & Mishra, C. (2021). Understanding people's relationship with wildlife in trans-Himalayan folklore. *Frontiers in Environmental Science*, 9, 595169. <https://www.frontiersin.org/articles/10.3389/fenvs.2021.595169>
- Bontempi, A., Venturi, P., Del Bene, D., Scheidel, A., Zaldo-Aubanell, Q., & Zaragoza, R. M. (2023). Conflict and conservation: On the role of protected areas for environmental justice. *Global Environmental Change*, 82, 102740. <https://doi.org/10.1016/j.gloenvcha.2023.102740>
- Braczkowski, A. R., O'Bryan, C. J., Lessmann, C., Rondinini, C., Crysell, A. P., Gilbert, S., Stringer, M., Gibson, L., & Biggs, D. (2023). The unequal burden of human-wildlife conflict. *Communications Biology*, 6(1), 1. <https://doi.org/10.1038/s42003-023-04493-y>
- Buckley, R. (2018). Simultaneous analysis of qualitative and quantitative social science data in conservation. *Society & Natural Resources*, 31(7), 865–870. <https://doi.org/10.1080/08941920.2018.1446232>
- Carter, N. H., & Linnell, J. D. C. (2016). Co-adaptation is key to coexisting with large carnivores. *Trends in Ecology & Evolution*, 31(8), 575–578. <https://doi.org/10.1016/j.tree.2016.05.006>
- Chanchani, P., Noon, B. R., Bailey, L. L., & Warrier, R. A. (2016). Conserving tigers in working landscapes. *Conservation Biology*, 30(3), 649–660. <https://doi.org/10.1111/cobi.12633>
- Chapron, G., Kaczensky, P., Linnell, J. D. C., von Arx, M., Huber, D., Andrén, H., López-Bao, J. V., Adamec, M., Álvares, F., Anders, O., Balčiauskas, L., Balys, V., Bedó, P., Bego, F., Blanco, J. C., Breitenmoser, U., Brøseth, H., Bufka, L., Bunikyte, R., ... Boitani, L. (2014). Recovery of large carnivores in Europe's modern human-dominated landscapes. *Science*, 346(6216), 1517–1519. <https://doi.org/10.1126/science.1257553>
- Chatterjee, M., Chatterjee, N., Chandel, P., Bhattacharya, T., & Kaul, R. (2022). Predicting negative human-tiger (*Panthera tigris*) interactions in mosaic landscapes around Dudhwa and Pilibhit tiger reserves in India. *Frontiers in Conservation Science*, 3, 999195. <https://doi.org/10.3389/fcsc.2022.999195>
- Chundawat, R. S., Sharma, K., Gogate, N., Malik, P. K., & Vanak, A. T. (2016). Size matters: Scale mismatch between space use patterns of tigers and protected area size in a Tropical Dry Forest. *Biological Conservation*, 197, 146–153. <https://doi.org/10.1016/j.biocon.2016.03.004>
- Dalmasso, S., Vesco, U., Orlando, L., Tropini, A., & Passalacqua, C. (2011). An integrated program to prevent, mitigate and compensate wolf (*Canis lupus*) damage in Piedmont region (northern Italy). *Hystrix, the Italian Journal of Mammalogy*, 23(1), 54–61. <https://doi.org/10.4404/hystrix-23.1-4560>
- Dhungana, R., Maraseni, T., Silwal, T., Aryal, K., & Karki, J. B. (2022). What determines attitude of local people towards tiger and leopard in Nepal? *Journal for Nature Conservation*, 68, 126223. <https://doi.org/10.1016/j.jnc.2022.126223>

- Fletcher, R., & Toncheva, S. (2021). The political economy of human-wildlife conflict and coexistence. *Biological Conservation*, 260, 109216. <https://doi.org/10.1016/j.biocon.2021.109216>
- Ghosal, S., & Kjosavik, D. J. (2015). Living with leopards: Negotiating morality and modernity in Western India. *Society & Natural Resources*, 28(10), 1092–1107. <https://doi.org/10.1080/08941920.2015.1014597>
- Gopalaswamy, A. M., Karanth, K. U., Delampady, M., & Stenseth, N. C. (2019). How sampling-based overdispersion reveals India's tiger monitoring orthodoxy. *Conservation Science and Practice*, 1(12), e128. <https://doi.org/10.1111/csp2.128>
- Government of Maharashtra. (2024). *Maharashtra payment of compensation for loss, injury, or damage caused by Wild Animals Act, 2023* (WLP-02.23/CR.52(Part-II)/F-1). Revenue and Forest Department. [https://mahaforest.gov.in/writereaddata/other\\_files/Notificati on%20Part-1.pdf](https://mahaforest.gov.in/writereaddata/other_files/Notificati on%20Part-1.pdf)
- Gross, E. M., Jayasinghe, N., Dahal, S., Tenzin, S., Klenzendorf, S., Vannelli, K., van Gils, E., Hilderink-Koopmans, F., McVey, D., Banasiak, N., Boron, V., Frances, D., Petrone, S., Elliott, W., Cranston, K., Clemens, K., Moore, J. F., Glikman, J. A., Kansky, R., ... Kinnaird, M. F. (2025). C2C—Conflict to coexistence: A global approach to manage human-wildlife conflict for coexistence. *Conservation Science and Practice*, 7(2), e13292. <https://doi.org/10.1111/csp2.13292>
- Habib, B. (2019). *Status of tigers, co-predators and prey in Tadoba Andhari Tiger Reserve (TATR)* (TR. No. 2020/05; p. 47). National Tiger Conservation Authority. <https://ntca.gov.in/assets/uploads/Reports/WII/TATR%20Phase%20IV%202019.pdf>
- Harihar, A., Chanchani, P., Pariwakam, M., Noon, B. R., & Goodrich, J. (2017). Defensible inference: Questioning global trends in tiger populations. *Conservation Letters*, 10(5), 502–505. <https://doi.org/10.1111/conl.12406>
- Harris, N. C., Wilkinson, C. E., Fleury, G., & Nhleko, Z. N. (2023). Responsibility, equity, justice, and inclusion in dynamic human-wildlife interactions. *Frontiers in Ecology and the Environment*, 21(8), 380–387. <https://doi.org/10.1002/fee.2603>
- Hill, C. M. (2021). Conflict is integral to human-wildlife coexistence. *Frontiers in Conservation Science*, 2, 734314. <https://doi.org/10.3389/fcsc.2021.734314>
- Jhala, Y., Gopal, R., Mathur, V., Ghosh, P., Negi, H. S., Narain, S., Yadav, S. P., Malik, A., Garawad, R., & Qureshi, Q. (2021). Recovery of tigers in India: Critical introspection and potential lessons. *People and Nature*, 3(2), 281–293. <https://doi.org/10.1002/pan3.10177>
- Jhala, Y. V., Gopal, R., & Qureshi, Q. (2008). *Status of tigers, co-predators and prey in India 2006*. National Tiger Conservation Authority & Wildlife Institute of India.
- Jhala, Y. V., Mungi, N. A., Gopal, R., & Qureshi, Q. (2025). Tiger recovery amid people and poverty. *Science*, 387(6733), 505–510. <https://doi.org/10.1126/science.adk4827>
- Jolly, H., & Stronza, A. (2025). Insights on human-wildlife coexistence from social science and Indigenous and traditional knowledge. *Conservation Biology*, 39(2), e14460. <https://doi.org/10.1111/cobi.14460>
- Karanth, K. K., Gupta, S., & Vanamamalai, A. (2018). Compensation payments, procedures and policies towards human-wildlife conflict management: Insights from India. *Biological Conservation*, 227, 383–389. <https://doi.org/10.1016/j.biocon.2018.07.006>
- Karanth, K. K., & Kudalkar, S. (2017). History, location, and species matter: Insights for human-wildlife conflict mitigation from India. *Human Dimensions of Wildlife*, 22(4), 331–346. <https://doi.org/10.1080/10871209.2017.1334106>
- Loveridge, A. J., Kuiper, T., Parry, R. H., Sibanda, L., Hunt, J. H., Stapelkamp, B., Sebele, L., & Macdonald, D. W. (2017). Bells, bomas and beefsteak: Complex patterns of human-predator conflict at the wildlife-agropastoral interface in Zimbabwe. *PeerJ*, 5, e2898. <https://doi.org/10.7717/peerj.2898>
- Manfredo, M. J., Teel, T. L., Don Carlos, A. W., Sullivan, L., Bright, A. D., Dietsch, A. M., Bruskotter, J., & Fulton, D. (2020). The changing sociocultural context of wildlife conservation. *Conservation Biology*, 34(6), 1549–1559. <https://doi.org/10.1111/cobi.13493>
- Margulies, J. D., & Karanth, K. K. (2018). The production of human-wildlife conflict: A political animal geography of encounter. *Geoforum*, 95, 153–164. <https://doi.org/10.1016/j.geoforum.2018.06.011>
- Massé, F. (2016). The political ecology of human-wildlife conflict: Producing wilderness, insecurity, and displacement in the Limpopo National Park. *Conservation and Society*, 14(2), 100. <https://doi.org/10.4103/0972-4923.186331>
- Moon, K. (2025). Naming it is not enough: An orienting map for understanding conservation's entanglement with power. *Conservation Letters*, 18(5), e13146. <https://doi.org/10.1111/conl.13146>
- Moon, K., Marsh, D., Cooke, B., & Kingsford, R. (2025). Relational commons: An ontological and governance framework beyond protected areas and the boundaries of conservation. *Conservation Letters*, 18(5), e13137. <https://doi.org/10.1111/conl.13137>
- Nagendra, H., Pareeth, S., & Ghate, R. (2006). People within parks—Forest villages, land-cover change and landscape fragmentation in the Tadoba Andhari Tiger Reserve, India. *Applied Geography*, 26(2), 96–112. <https://doi.org/10.1016/j.apgeog.2005.11.002>
- Nair, R., Dhee, Patil, O., Surve, N., Andheria, A., Linnell, J. D. C., & Athreya, V. (2021). Sharing spaces and entanglements with big cats: The Warli and their Waghoba in Maharashtra, India. *Frontiers in Conservation Science*, 2, 683356. <https://doi.org/10.3389/fcsc.2021.683356>
- Persson, J., Rauset, G. R., & Chapron, G. (2015). Paying for an endangered predator leads to population recovery. *Conservation Letters*, 8(5), 345–350. <https://doi.org/10.1111/conl.12171>
- Pooley, S. (2021). Coexistence for whom? *Frontiers in Conservation Science*, 2, 726991. <https://doi.org/10.3389/fcsc.2021.726991>
- Qureshi, Q., Jhala, Y. V., Yadav, S. P., & Mallick, A. (2023). *Status of tigers, co-predators and prey in India, 2022* (Nos. 81-85496-92-7). National Tiger Conservation Authority.
- Ravenelle, J., & Nyhus, P. J. (2017). Global patterns and trends in human-wildlife conflict compensation. *Conservation Biology*, 31(6), 1247–1256. <https://doi.org/10.1111/cobi.12948>
- Ripple, W. J., Estes, J. A., Beschta, R. L., Wilmers, C. C., Ritchie, E. G., Hebblewhite, M., Berger, J., Elmhagen, B., Letnic, M., Nelson, M. P., Schmitz, O. J., Smith, D. W., Wallach, A. D., & Wirsing, A. J. (2014). Status and ecological effects of the world's largest carnivores. *Science*, 343(6167), 1241484. <https://doi.org/10.1126/science.1241484>
- Sandbrook, C. (2017). Weak yet strong: The uneven power relations of conservation. *Oryx*, 51(3), 379–380. <https://doi.org/10.1017/S0030605317000618>
- Shackleton, R. T., Walters, G., Bluwstein, J., Djoudi, H., Fritz, L., Lafaye de Micheaux, F., Loloum, T., Nguyen, V. T. H., Rann Andriamahefazafy, M., Sithole, S. S., & Kull, C. A. (2023). Navigating power in conservation. *Conservation Science and Practice*, 5(3), e12877. <https://doi.org/10.1111/csp2.12877>
- Shaikh, A. (2024). Sacred Stripes: Reverence for Waghoba in Central India | Roundglass | Sustain. <https://roundglassustain.com/conservation/waghoba-central-india>
- Shaikh, A., & Suryawanshi, K. (2025). Human-tiger interactions in Tadoba buffer zone, 2024–2025 [Dataset]. *Zenodo*. <https://doi.org/10.5281/zenodo.17210696>
- Sheikh, J. A., & Vanashree, L. (2014). A study of wildlife management and tourism development in Tadoba Andhari Tiger Reserve In Maharashtra, India. (2347).
- Sillero, C., & Laurenson, M. (2001). Interactions between carnivores and local communities: Conflict or co-existence? In *Carnivore conservation* (pp. 282–312), Cambridge University Press.
- Suryawanshi, K. R., Bhatnagar, Y. V., Redpath, S., & Mishra, C. (2013). People, predators and perceptions: Patterns of livestock depredation by snow leopards and wolves. *Journal of Applied Ecology*, 50(3), 550–560. <https://doi.org/10.1111/1365-2664.12061>

- Thekaekara, T., Bhagwat, S. A., & Thornton, T. F. (2021). Coexistence and culture: Understanding human diversity and tolerance in human-elephant interactions. *Frontiers in Conservation Science*, 2, 735929. <https://www.frontiersin.org/articles/10.3389/fcosc.2021.735929>
- Tiedje, K. (2008). The promise of the discourse of the sacred for conservation (and its limits). *Journal for the Study of Religion, Nature and Culture*, 1(3), 326–339. <https://doi.org/10.1558/jsrnc.v1i3.326>

### SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

**Appendix 1.** Interview guide.

**Appendix 2.** Human ethics approval.

### Appendix 3. Thematic analysis codebook.

**How to cite this article:** Shaikh, A., & Suryawanshi, K. (2026). Living with tigers: Perceptions of risk, equity, and cultural change amidst tiger attacks in a reserve's buffer zone. *People and Nature*, 00, 1–15. <https://doi.org/10.1002/pan3.70301>