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RESEARCH ARTICLE

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ABSTRACT

How are the moral relations between communities and the Sumatran tiger (*Panthera tigris sumatrae*) being reconfigured as forests fragment and land-use change accelerates across Sumatra's conservation landscape? This article addresses that question ethnographically, drawing on forty semi-structured interviews conducted in Agam and Pasaman Regencies (West Sumatra) between April and June 2026 and interviews with Yayasan SINTAS Indonesia. The article documents the three animistic category of the tiger, comprising *Datuk*/ancestor, *harimau jadi-jadian*, and *harimau tandang*, and traces how it is being reshaped by habitat fragmentation, commodity-driven land expansion, generational interruption of customary authority, and state translocation protocols. Cases from Agam and Pasaman show that the same kind of sighting yields divergent outcomes, a buried relative, cattle predator, a rehabilitated administrative subject, or a marketable carcass, depending on which institution (*pawang*, BKSDA, NGO, or illegal-trade collector) retains operational authority at the moment of conflict. Conservation programmes in Indonesia frequently treat sacred values and “local wisdom” as stable cultural inheritances; the material presented here shows instead that these moral relations are conditional and subject to transformation. Using a cosmopolitical-frontier framework, the article argues that effective conservation must engage the plural forms of human–tiger relation simultaneously at work and the political-economic forces that recalibrate them, rather than treating community engagement as the recovery of a stable cultural inheritance.

Keywords: Cosmopolitics, Human-tiger conflict, Conservation, Socio-natural relation, Sumatra, Cosmopolitical frontiers, Wildlife

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1. Introduction

Over the past two decades, biodiversity conservation policy has increasingly recognized the role of local communities and indigenous peoples in safeguarding species and their habitats. In this recognition, existing scholarship has examined their attachment and moral relation to sacred natural sites and species (Dudley et al., 2012) and traditional ecological knowledge (TEK) as a pivotal aspect for development, and conservation policy (Shackeroff & Campbell, 2007). What remains insufficiently examined, and what this article addresses, is how these aspects are actively reconfigured by the encounter of state and NGO with the communities themselves as conservation landscapes are transformed by habitat fragmentation and land use change by smallholders and large-scale plantation projects.

The argument of this article on Sumatran human–tiger relations sits across two largely disconnected literatures, each only focusing on one aspect while leaving the dynamic interface this article addresses obscured. On one side, a substantial body of wildlife biology and landscape ecology has established the species' dependence on contiguous forest cover (Kartika, 2023; Sunarto et al., 2012), traced the abundance of tigers and their prey to illegal hunting and habitat loss within protected areas (O'Brien et al., 2003), mapped prey-habitat potential in Aceh (Fazlurrahman et al., 2024), and quantified the landscape-metric correlates of human–tiger conflict density in the Agam corridor, where 94% of the corridor sits outside protected status (Kholis et al., 2026). These studies supply the empirical baseline against which any social analysis must work, but they treat the human community as a statistical variable in the habitat model, such as population density, proximity to settlement, hunting pressure, rather than as a set of institutions and relational forms between humans and wildlife whose own categorical operations partly produce the patterns the models describe.

On the other side, a growing ethnobiology and “local wisdom” literature has documented customary tolerance and ritual mediation across Sumatra: McKay et al. (2018) survey Minangkabau, Kerinci, and Melayu responses to human–tiger conflict scenarios in Kerinci Seblat and demonstrate that cultural tolerance varies with the moral classification of the attack, including the recurring role of the tiger as enforcer of moral rule; Gea et al. (2019) describe customary hunting prohibitions in Mane sub-district, Aceh, and recommend the local-wisdom model for replication elsewhere; Zulkarnain et al. (2022) document the Menyemah *Kampung* ritual of gratitude to tigers in the Kerumutan Wildlife Reserve and call for its documentation in the face of modernisation; and Soekmadi et al. (2025) survey community perspectives on stakeholder engagement in Bukit Barisan Selatan.

These studies are important to understand the ecological baseline of conservation in different landscapes of Sumatra that are layered in a moral relation between humans and tigers established by adat institutions from a cultural-historical perspective. Yet most of this literature only describes what exists and is preoccupied with identifying patterns rather than tracing how it changes and transforms amidst the changing socio-ecological context. It tends to treat “local wisdom” as a relatively stable cultural asset whose function is either to be respected by, replicated for, or recovered against the encroachment of modernity. What is missing across both sides is how knowledge and practices are themselves recalibrated as the landscape changes: how categorical relation among communities and also conservation staff on the ground related to tiger are maintained, negotiated, withheld, or revised; how ritual authority does or does not pass to the next generation of tiger specialists; how sacred status is conditionally extended or actively withdrawn as forests fragment, conservation institutions arrive, and illegal wildlife markets offer cash settlements that the state's administrative response cannot match?

This article makes its contribution at that interface. Drawing on forty semi-structured interviews conducted in Agam and Pasaman Regencies (West Sumatra) between April

and June 2026, longitudinal fieldwork in Riau (2013–2024), and comparative interviews with Yayasan SINTAS Indonesia, and reading this material through anthropological work on political ontology, cosmopolitics, and forms of attachment, it documents the operative animistic three-category Sumatran tiger taxonomy, comprising *Datuk-Inyia*k/ancestor, *harimau jadi-jadian* (weretiger), and *harimau tandang*, and traces how communities actively reshape and place emphasis on the *harimau tandang* under habitat fragmentation, commodity-driven land expansion, generational interruption of *pawang* and *ninik-mamak* authority, and state translocation protocols that substitute administrative removal for ritual mediation. The article's aim is to treat the persistence, adaptation, or erosion of this categorical relation as mutually constituted by human, habitat, and wildlife, an analytical position that both the landscape-ecology and the local-wisdom literatures have overlooked.

The article is organized as follows. The remainder of this Introduction sets out the anthropology conceptual framework of political ontology, cosmopolitics, and forms of attachment used to read human–tiger relations. [Section 2](#) describes the ethnographic method and field sites in Agam, Pasaman. [Section 3](#) presents the desk study and empirical findings in three sub-sections: comparative issues of human tiger relation in Sumatra (3.1); the animistic moral cosmology and three-category taxonomy of the tiger sustained in Agam, Pasaman, and beyond (3.2); and the four concurrent mechanisms through which that cosmology is being recalibrated and the cosmopolitical frontier this produces (3.3). The Discussion draws these findings together showing how the same kind of sighting yields divergent outcomes depending on which institution retains operational authority at the moment of conflict. The Conclusion draws out the implications for ontologically-sensitive conservation policy in Sumatra.

1.1. Framework: Anthropology, cosmopolitics and diverging form of socio-natural relation and its transformation

Anthropology has long shown that human–environment relations cannot be understood by focusing merely on cognitive classification. Early ethnobotanical and ethnozoological work overlooked the everyday practices through which people relate to non-human beings. Later biocultural, phenomenological, and ontological approaches brought those practices, and the worldviews behind them, into view (Ingold, 2000; Viveiros de Castro, 1998; Kohn, 2013). We build on this idea: human relations with other species are ways of being in the world. Our task is to identify the framework a community uses to make sense of non-humans, and to trace how it shifts under historical pressure.

We draw on Philippe Descola (2005) framework, which sets out four ways societies organize human–non-human relations.¹ Two of these matter here. Naturalism, dominant in modern science and state conservation, assumes a shared physical world; non-humans are objects to be classified, managed, and conserved. Animism instead treats non-humans as social beings with intentions, capable of moral reciprocity. It underlies the three-category tiger taxonomy in [Section 3.1](#). Sumatran human–tiger relations are largely animist, but overlaid by naturalist state conservation; the interest of the case lies where these two frameworks meet, and in the tensions that meeting creates.

¹ *Ontology* here follows the anthropological “ontological turn”: the assumptions a collective makes about what kinds of beings exist and how they relate, such that different peoples may inhabit different worlds rather than merely hold different views of one world. Descola (2013) distinguishes four such ontologies by how humans and non-humans are aligned along *interiority* (inner life) and *physicality* (bodily form): *animism* (shared interiority, different bodies), *totemism* (shared interiority and physicality), *naturalism* (shared physical nature, human-exclusive interiority — the modern scientific ontology), and *analogism* (both differing, a world of correspondences). This article concerns chiefly the animism–naturalism encounter.

The practical and ethical consequences of these ontological differences are pivotal to understand human-tiger relation. Within an animist framework a tiger may be addressed as ancestor, deceased relative, or guardian, and the legitimate response to its appearance is divinatory and ritual, central to the daily life of communities living in tiger habitat; within a naturalist framework it is a member of an endangered species whose population must be administratively managed, and the legitimate response is capture, translocation, or rehabilitation. The categorical move from one framework to the other is not a change of opinion about the same animal but a change in what the animal is taken to be and how people relate to the species during the encounter. Conservation interventions that proceed as if the change is a matter of “awareness”, and that aim to update community classifications by communicating the protected status of the species, misread the situation by assuming a shared underlying object that both frameworks are talking about.

In this framework, across societies, relations are differentiated through modes of relation each carrying distinct moral and social logics. These attachments form an ecological ethics through which humans interpret, regulate, and rank their ties with other beings; they are also the operational layer at which the Sumatran three-category tiger taxonomy is enacted, since each category corresponds to a permitted mode of attachment (ritual exchange with the *Datuk*, prohibited killing of the *harimau jadi-jadian*, lethal removal of the *harimau tandang*). Sacredness, on this reading, is not a static property attaching to species or places, it is the historically contingent outcome of practices of attachment that can be intensified, attenuated, or withdrawn as conditions change. The withdrawal of sacred status from a species under conditions of conflict, conservation failure, or market pressure, observed repeatedly in the Sumatran material, is itself a categorical operation within this apparatus rather than a sign of cultural decline.

The cosmopolitics literature supplies the apparatus for analysing what happens when such ontologies meet. The cosmopolitic perspective (Stengers, 2005, Stengers, 2010; Latour, 2004) rejects the assumption of a single “nature” known by science and shared across cultures, positing instead a pluriverse whose common measures must be provisionally composed rather than presumed. Political ontology (De la Cadena & Blaser, 2018) attends to the equivocations this produces different groups using the same words (“tiger,” “forest,” “conservation”) to refer to radically different entities, so that conflict reflects the co-presence of incommensurable worlds rather than divergent perspectives on a shared one. Taken together, these perspectives reframe the diversity of emerging human-tiger relations traced in the sections that follow, such as sacred *Datuk*, moral enforcer, impersonal predator, protected species, and personalized animal not as a graded scale from tradition to modernity, but as the differentiated outcomes of intersection of animist and naturalist ontologies encountering one another under uneven institutional and ecological conditions. The cosmopolitical frontier, as used in this article, names the spatial and institutional signature of that encounter: the site at which the plural forms of relation documented below are simultaneously produced, sustained, and eroded.

2. Method

This article draws on primary sources consisting of 40 semi-structured interviews and accompanying participant observation conducted between April and June 2026 across four villages, Koto Rantang, Tanjung Baringin, Sontang, and Koto Rajo, in Agam and Pasaman Regencies, West Sumatra. Interlocutors in the West Sumatra–Pasaman component fall into four categories. (i) Conservation NGO staff: field officers and senior personnel of Yayasan SINTAS Indonesia and COP Indonesia, whose multispecies and cosmopolitical-frontier

framing informed the comparative analysis. (ii) State conservation officers: personnel of BKSDA Sumatera Barat (*Balai Konservasi Sumber Daya Alam Sumatera Barat*), particularly Resort Maninjau, responsible for first-line human–tiger conflict response in the Agam–Pasaman corridor. (iii) Customary and local-government authorities: *ninik mamak* (matrilineal customary leaders), *Wali Nagari*, *Kepala Jorong* (hamlet heads), *Patroli Nagari* (PAGARI), and individuals locally recognised as knowledgeable about tiger-mediation practices. (iv) Smallholders and *ladang* cultivators who had experienced livestock loss, tiger sightings, or near-encounters in the preceding five years. Within this category, purposive attention was given to women cultivators, members of directly affected households, older residents, and people who lived or worked alone. These interlocutors were not treated as inherently vulnerable groups; rather, their inclusion allowed the study to examine how livelihood dependence, mobility, care responsibilities, living arrangements, language, and access to response institutions shaped the consequences of human–tiger encounters. Sampling proceeded purposively through referral chains beginning from NGO and BKSDA contacts and continuing through customary authorities and conflict-affected households. Each site was visited for between four and seven days. Interviews ranged from forty-five minutes to three hours; informant identifiers below follow the convention of role, village, and date of interview.

Data and Methods of Fieldwork

Data Category	Source Format	Total Documents	Description & Examples
Primary Field Data (Interviews & Transcripts)	Transcripts & Field Notes	79	Verbatim transcripts, recordings, and interview notes from the project. This includes in-depth interviews with key stakeholders such as BKSDA, FKL, WCS, SINTAS, PAGARI members, local journalists, and community members in various villages (e.g., Koto Rantang, Baringin, Pasaman).
Online Media, News & Press Releases	Webpages & URLs	59	Online news coverage, press releases, and digital articles detailing human–tiger conflicts (HTC), rescue evacuations, hoax clarifications, and conservation milestones. Key sources include Mongabay, BBC News Indonesia, DetikNews, ANTARA News, and various local media.
Academic Journals & Scientific Articles	PDF Documents	49	Peer-reviewed articles, spatial analyses, and conservation reports discussing tiger ecology, human–wildlife conflict mapping, genetics, and socio-ecological drivers. Examples include “ <i>Tolerating Tigers</i> ”, “ <i>Tigers Need Cover...</i> ”, and spatial models on deforestation.
Theses, Dissertations & Books	PDF Documents	9	Comprehensive academic texts, including anthropological, historical, and ecological dissertations regarding human–nature relations in Sumatra. Examples include <i>The Fourth Circle</i> , <i>Being and Becoming</i> , <i>Biosocial Becomings</i> , and specific doctoral/master’s theses on Sumatran tiger conservation.
Multimedia & Audiovisual Data	Videos (YouTube, 20detik)	5	Documentaries and video recordings, primarily focusing on traditional tiger handlers (<i>pawang harimau</i>) like Kek Carwani, local forest wisdom, and news clips of tiger evacuations.

Several interviews were conducted partly in local Minangkabau language or dialect and involved informal interpretation by locally present interlocutors. This was particularly relevant for some women and older residents whose detailed knowledge of cultivation and tiger encounters was not easily expressed in Indonesian. Translation was therefore treated as part of the research encounter rather than as a neutral transfer of information. Ambiguous passages were paraphrased cautiously, and accounts dependent on mediated interpretation were not presented as verbatim quotations.

A third stream of data was assembled through digital archive collection of social media post. Indonesian-language social-media posts (Instagram and YouTube) and online news reports referencing human–tiger encounters, tiger killings, captures, translocations, and ritual or customary responses were systematically collected for the period January 2018 to May 2026, using the keyword set: *harimau*, *harimau sumatera*, *BKSDA*, *konflik harimau*, *jejak harimau*, *pawang harimau*, plus the corresponding village and regency names. Google’s research-assistant tool NotebookLM supported three discrete and bounded tasks: (a) classification of media items by event type (sighting, livestock attack, human casualty, capture/translocation, customary response); (b) cross-source content mapping to identify recurring narrative frames; and (c) preliminary text coding of recurring regional conflict patterns across the collected corpus. All AI-generated classifications were manually verified against the original sources, and any item informing an analytical claim was re-read in full by the first and third author. The AI-assisted media analysis functions as a triangulation aid against interview and field-note material; it is not an independent evidentiary stream.

The method is best understood as a mixed-methods approach combining different techniques of data gathering. This design was chosen deliberately for the analytical purpose at stake, to capture the heterogeneity of human–tiger relations across Sumatra’s cosmopolitical frontier rather than to produce a thick description of a single village. Ethical clearance for the 2026 fieldwork was obtained from the Faculty of Social and Political Sciences, Universitas Indonesia; all interlocutors gave informed consent to recording and to use of their statements in publication, and informants who requested anonymity have been assigned pseudonymous role-codes.

3. Results

3.1. Comparative desk study: Socio-ecological change and different form of tiger-human relation in Sumatra

To understand the case of West Sumatra, we have to compare the different form of emerging human tiger relation and its relation to conservation landscape in Sumatra. The conservation landscape for the Sumatran tiger (*Panthera tigris sumatrae*) relies on a fragmented network of protected areas, ranging from colonial-era reserves to modern national parks, all of which face distinct anthropogenic pressures. The Gunung Leuser National Park, historically the focus of major international interventions like the European Union-funded Leuser Development Programme, has been heavily impacted by illegal logging networks and road expansion that fragment the ecosystem (McCarthy, 2006, pp. 217, 222; Sloan et al., 2019, p. 5). To the south, Kerinci Seblat and Bukit Barisan Selatan National Parks—which together with Leuser form a World Heritage Site—are besieged by agricultural encroachment for commodities like coffee and cinnamon, as well as road construction that severs vital habitat connectivity (Linkie et al., 2008, p. 2411; Sloan et al., 2019, p. 2). In the eastern lowlands, Way Kambas National Park was solidified as a reserve partly through the translocation of local villagers to reduce conflict, yet it remains an isolated forest patch surrounded by dense human settlements (Nyhus & Tilson, 2004, p. 73).

The peat swamp forests of Berbak-Sembilang face threats from land cover transitions and fire risks associated with drainage for agriculture (Ariyanto et al., 2021). Most critically, the Tesso Nilo National Park and Bukit Tigapuluh landscapes in Riau have suffered the highest rates of deforestation due to the rapid expansion of industrial acacia (pulp) and oil palm plantations, often facilitated by the classification of these forests as “wasteland” (Sunarto, 2011, pp. 252–253). Meanwhile, the Rimbang Baling Wildlife Reserve functions as a crucial component of the “RIMBA” corridor initiative (Riau-Jambi-Sumatera Barat), designed to connect these isolated blocks, though it struggles against the severance of connectivity caused by highway development and resource extraction (Sulistiyawan et al., 2017, p. 117; Sunarto, 2011, p. 57).

The moral relation as I mentioned in the previous section is now at a low point due to massive forest destruction and increasing human-tiger conflict (Neo et al., 2022; Soekmadi et al., 2025). When its habitat is damaged, the tiger loses its natural prey sources and begins to prey on residents’ livestock in plantations or forest edges (Lubis et al., 2020; Nugraha & Sugardjito, 2009). Data records over 1,192 human-tiger conflict reports across Sumatra between 2001 and 2019, resulting in casualties on both sides (Kartika & Heitkönig, 2022). Financial losses from dead livestock and fear of attacks on human life are beginning to erode traditional values (Kartika & Heitkönig, 2022; McKay et al., 2018). The tiger, once considered sacred, is slowly shifting its perception to a “predator” that must be eliminated (Soekmadi et al., 2025). In Riau, the majority of negative interactions occur in settlements and plantations, not within the forest, indicating how narrow the remaining boundaries for the tiger are (Neo et al., 2022). On the upper Subayang River, Kampar Regency, two villages, only two to three kilometres apart, maintain strikingly different relations to the tiger. In Malako Kociak the tiger is addressed as *kakek*, the grave of Datuk Pagar tremors when the Datuk crosses, an annual buffalo sacrifice renews the ancestral covenant, and residents describe the tiger as guardian of gardens and arbiter of land disputes. In Aur Kuning, just 4-5 Km upriver of Malako Kociak, residents report frequent conflict and do not classify the species in kin terms. A historical parallel is the *seuneubok* institution in South Aceh. As McCarthy, 2006, pp. 48–66) documents, the *seuneubok* governed the liminal space between *gampong* and deep forest; the *harimau seuneubok* was summoned to the *kenduri seuneubok* by the *pawang* and credited with guarding crops and excluding foreign tigers. Permanent lowland settlement, market integration, and the substitution of state forestry agencies for the customary chief progressively dismantled the arrangement; by the close of McCarthy’s fieldwork the *seuneubok* had been repurposed for logging-fee collection and the tiger reclassified as a pest managed by BKSDA.

The Subayang River pair reveals two adjacent villages — one addressing the tiger as *kakek* and the other reporting frequent conflict with no kin idiom — whose divergence becomes intelligible once each village is read through the four enabling conditions of forest cover, customary authority, livelihood base, and external intervention. The *seuneubok* material from South Aceh (McCarthy, 2006) supplies the historical template for the erosion of customary mediation. Across Mediation between humans and tigers through the work of the *pawang* in Aceh is exemplified by Sarwani Sabi (Kek Carwani), whose role as hereditary mediator was formally engaged by Aceh BKSDA between 2007 and his death and whose practice has been continued by his son Jauhari Sabi. In other places, specialists mediating between humans and tigers can also be seen in the *Limeh* offering of boiled eggs in banana-leaf vessels in West Sumatra and the *Bailau* chant rendered during construction of the trap in Pesisir Selatan instantiate the same logic at different ritual scales, in which the tiger is approached as a guest or a relative rather than as quarry (McKay et al., 2018). McCarthy’s account of the *kenduri seuneubok* in agrarian South Aceh, in which the *pawang* summons the *harimau seuneubok* to participate in a feast, describes a more institutionalised version of this

mediation in which the tiger is a co-resident of the cultivated frontier of their agroforestry crops (McCarthy, 2006, pp. 48–60).

What emerges from Gunung Leuser to Tesso Nilo, from the Subayang River pair to the seuneubok of South Aceh, is that the tiger's moral standing is never a fixed cultural trait but a register that moves with the material conditions of the landscape itself, where forest cover, customary authority, livelihood base, and external intervention hold together. Human-tiger relations are best read not as belief systems in isolation but as sensitive registers of ongoing social-ecological change. Having traced this pattern comparatively, across the fragmented Sumatran reserve system, the Subayang River pair, and the Acehese seuneubok the following section narrows to a single empirical ethnographic case within West Sumatra itself: the regencies of Agam and Pasaman. This closer-grained focus allows the conditions to be examined within specific ethnographic cases we encounter during our fieldwork.

3.2. Animistic realm in west Sumatra

Sacred and animistic human relations to tiger persist in pockets across Sumatra's conservation landscape, where the tiger figures less as a wild animal than as a moral subject embedded in human social order. The kinship idiom is the entry point. Across our field sites in West Sumatra the tiger is addressed and discussed in kin terms such as *Datuk*, *Inyia*k, *Kakek* (grandfather) and is understood to occupy a position within a primordial covenant binding ancestors, descendants, and territory. *Datuk* Safril, a customary leader in Koto Rantang, Agam Regency, West Sumatra Province, framed the violent encounters of the 1980s, in which several villagers were killed, including one whose heart was eaten, in terms of reciprocity: the victims had transgressed the calendrical prohibition on outside activity on Fridays, and the tiger's intervention was read as enforcement of that prohibition rather than as ordinary predation.

Ali Nurdin, a customary elder in Sontang Cubadak, described the tiger as a being that once made moral disorder perceptible. When the village had been “soiled” by conduct that violated religious or customary norms, the tiger's appearance prompted elders to ask whether someone had taken a *salah langkah*, or a morally improper step. In this account, the tiger did not merely punish an offender. Its appearance communicated that something within the social order required investigation. Ali repeatedly situated this interpretive practice in the past. He contrasted an earlier period, when the appearance of a tiger could trigger collective moral inquiry, with the more densely settled and institutionally transformed village of the present. The relation has therefore not simply disappeared, but its capacity to organise a collective response has weakened.

From within this idiom, our interlocutors distinguish three categories of tiger. The first is the *Inyia*k or *Datuk* proper: the ancestral guardian, addressed in honorifics, present in named places and graves and engaged through ritual rather than encounter. The second is the *harimau jadi-jadian*, the transformed tiger, a deceased local person who has assumed tiger form after death, sometimes described as *harimau jinak* (“familiar” or “tame”) because the village recognises it as their former relative. The third is the *harimau dari luar*/harimau tandang/harimau liar, a tiger from elsewhere, often described as “*tidak tahu aturan*,” one that does not know the local *adat* and that may attack innocent residents; such a tiger is understood as a rogue, and it is the only category for which lethal removal is unambiguously legitimate. These distinctions were not held or transmitted only through male customary authorities such as *pawang* and *ninik mamak*.

These locally variable classifications were not merely descriptive; they also produced practical consequences for conservation intervention. During fieldwork in Sontang

Cubadak we encountered a case in which the schema was acted upon against the institutional pressure of BKSDA. A tiger that had been moving through the village area was recognised by *adat* leader (*ninik mamak*) Ali Nurdin and the surrounding kin network as a *harimau jadi-jadian* whose human predecessor, a man who had cultivated *ladang* at a place called Sikuakua and had died approximately six years earlier, had assumed tiger form in the manner described above. When the tiger was eventually found dead in the vicinity of the village, the body was not delivered to the conservation agency for autopsy and biological disposal but was prepared for burial within the village itself; the death was treated with the gravity reserved for a human passing, and the tiger was buried there alongside members of the community. While Ali Nurdin and other local representatives were still negotiating with BKSDA officers over the custody of the carcass, other residents dug a grave in front of the house and proceeded with the burial. By the time the negotiations ended, the tiger had already been interred, and the grave was subsequently covered with cement to prevent the body from being removed. BKSDA officers had earlier approached the family with a translocation proposal intended to remove what state protocol classified as a “problem tiger,” but the residents and the household refused: as Ali Nurdin formulated it, “it was this [recognition of kinship] that made the residents and the family reluctant to allow BKSDA to take it out”. The dilemma in this case was not between conservation and depredation, but between two incompatible ontologies of what the tiger is: for the state, an endangered *Panthera tigris sumatrae* subject to administrative custody under Law on conservation; for the villager, a deceased relative whose post-mortem trajectory belonged inside the *kampung*’s funerary and customary order.

3.3. Tiger from elsewhere (*Harimau Tandang*): Emerging hostile human-tiger socio-natural relationship in west Sumatra

The moral relations described in the previous section coexist with other forms of human–tiger relation emerging under changing socio-ecological conditions. Landscape transformation, livestock predation, and the growing involvement of conservation institutions have led particular tigers to be experienced as immediate threats to household assets and everyday safety. This does not amount to a general shift towards hostility against tigers. Residents may demand the removal of a livestock-predating individual while continuing to recognise other tigers as familiar residents, territorial guardians, or legitimate inhabitants of the forest.

The shift from tiger-as-sacred subject to cattle predator should be read not as a single cultural rupture but as the cumulative effect of four mechanisms working in tandem. The first is the fragmentation of tiger habitat across Sumatra. The second is economic pressure: as villagers clear land for commodity booms such as banana in Agam, encounters with tigers multiply, and the animal’s moral standing is increasingly weighed against material survival. The third is generational change, as customary authority carried through *pawang* lineages and *ninik mamak* weakens when its transmission breaks down. The fourth is state intervention: BKSDA’s translocate-or-rehabilitate protocol substitutes administrative removal for ritual mediation, quietly confirming that the tiger no longer belongs to the village’s moral order. No driver acts alone; together they slowly recalibrate the three-category taxonomy into a residual binary of “threat” and “protected species.”

With the changing landscape and socio-ecological context, the cosmological framework of several communities in Agam and Pasaman distinguishes between local guardian tigers (*harimau kampung* or *Inyik Balang*) and visiting or outside tigers, locally known as “*harimau tandang*”. Local narratives suggest that *harimau tandang* are highly ferocious outsiders that frequently challenge local tigers for territorial dominance. To protect their local

guardian tigers from defeat, communities adhere to strict ecological and dietary taboos. For instance, it is forbidden to harvest or cook bamboo shoots (*rebung*), ferns (*pakis*), and taro leaves (*daun keladi*) during the Eid al-Adha period. Locals believe that consuming these plants will physically weaken the local tigers, causing them to lose their territorial battles against the *harimau tandang*, which would consequently endanger the village.

When livestock predation occurs, locals often reject the idea that their guardian *Inyiak Balang* is responsible, as traditional tigers are believed to only attack if a profound moral transgression has occurred in the village. Instead, they attribute these attacks to “*harimau liar*” (wild tigers) or outside tigers that they suspect have been intentionally translocated and released into their forests by the Natural Resources Conservation Agency (BKSDA). This intersection of traditional cosmology and modern conservation interventions has catalyzed the emergence of new, complex relations between human subjects and tigers across Agam and Pasaman. Human-tiger conflicts triggered communal introspection to identify moral violations. Today, with the transition of livelihoods, livestock (such as buffaloes) are primarily viewed as vital liquid assets and savings for significant expenses like education or weddings. Consequently, tiger predation is increasingly framed as a severe economic grievance rather than a spiritual omen. This economic vulnerability has fostered a transactional relationship with the state; villagers express deep frustration towards the government and BKSDA for protecting the tigers without providing financial compensation for their devoured livestock.

The change also happens as a result of emerging “Tiger Phobia” illustrated by a distinct generational divergence in ontologies regarding tigers. While elders (above 50 years old) maintain a respectful coexistence and view tiger encounters as a customary aspect of living near the forest, the younger generations exhibit profound “tiger phobia”. This demographic is highly reactive to tiger tracks and relies heavily on social media to amplify their anxieties, demanding immediate government intervention and the physical removal of the animals. Social media has thus become a new socio-technological tool used by locals to mediate and politicize human-wildlife interactions.

This new situation has also prompted the establishment of *Patroli Anak Nagari* (PAGARI), community-led patrol groups facilitated by BKSDA and NGOs like SINTAS and COP in Agam and Pasaman. It has created a novel hybrid form of local and western science knowledge to arrange relationship with tigers. Local patrol members are trained to use smart applications, thermal drones, and camera traps, shifting their interaction with tigers from fearful avoidance to empirical monitoring. Intriguingly, this scientific engagement often blends with local spirituality and form of everyday knowledge; some PAGARI members report that their active, non-lethal engagement with tigers has replaced their fear with a profound sense of emotional closeness, viewing the tiger as a mutual protector of the forest when approached with pure intentions. They also learn tiger behaviour from elders and from their own experiences.

As already mentioned in previous sections, in the regions of Agam and Pasaman, the relationship between local communities and tigers in several parts is heavily anchored in local cosmology, where the tiger is not seen as an animal, but as a respected ancestor or spiritual entity. However, this sacred cosmological relationship is increasingly challenged by an undeniable ecological reality: habitat pressures and land-use changes are driving tigers to attack community livestock, creating a stark “gap” between local wisdom (the tiger as a protector) and factual occurrences (the tiger as a predator). In Agam and Pasaman, livestock depredation (*serangan ternak*) has become the most frequent form of human-tiger conflict.

This transition to an “impersonal predator” is severely exacerbated by local animal husbandry practices. Field interviews reveal that cattle (cows) are traditionally left to roam

free without being caged (*dilepas biar tidak dikandang*), making them highly vulnerable prey for displaced tigers. Dogs, often used for hunting or kept in villages or crop fields, are also frequent victims of these encounters. Consequently, people reconceptualized their moral relation to the tiger, separating the tiger from elsewhere from the *harimau kampung*. Driven by economic loss from predated cattle and dogs, interactions shift from reverence to retaliation, often indirectly through the laying of indiscriminate wire snares (*jerat*) originally intended for wild boars but which frequently kill tigers traversing the forest edge.

As conflicts escalate, the tiger undergoes a final transition into a “personalized” and highly managed biological subject through the interventions of state agencies (BKSDA) and NGOs like SINTAS and COP. Rather than relying solely on traditional shamans or customary law to appease the *Datuk*, human-tiger relations are now mediated through technocratic conservation programs. One major intervention is the introduction of “Tiger Proof Enclosures” or communal cages (*kandang komunal*) to secure the previously free-roaming cattle, completely restructuring how the community interacts with both their livestock and the tiger. Furthermore, to manage this new reality, NGOs and the BKSDA have formed community-level task forces known as PAGARI (*Patroli Anak Nagari*) in high-conflict villages across Agam and Pasaman. PAGARI acts as the modern intermediary between the humans and the tiger. Instead of reciting mantras, these local patrols utilize thermal drones, install camera traps to verify individual tiger identities, dismantle snares, and educate the village. Through these programs, the once-mythical *Inyiak* is transformed into a monitored, individualized conservation subject that requires active physical protection and spatial separation from human economic assets.

The new ecological awareness is now restructuring how locals explain tiger encounters. Beyond attributing conflicts to broken taboos, many residents and PAGARI members now articulate ecological drivers for tiger displacement, such as extreme habitat fragmentation, infrastructure development, and the depletion of the tiger’s natural prey due to massive, unregulated wild boar hunting by outsiders. This hybrid understanding acknowledges that tigers are being forced into human settlements out of starvation and habitat loss, bridging traditional empathy with modern ecological science. What the cosmopolitical frontier describes, then, is not the replacement of one ontology by another but the simultaneous presence of several or a combination of them.

4. Discussion

The reconfiguration mentioned in previous section is a good entry point to identify divergent outcomes across the Sumatran landscape. The findings across [Sections 3.1](#) and [3.2](#) answer the question posed in the introduction: how are the moral relations between communities and the Sumatran tiger being transformed as forests fragment, illegal wildlife trade expands, and land-use change accelerates? The answer offered here is that the transformation is not a single shift from moral relation based on “local tradition” to modern conception of human-wildlife relation but the compound effect of four concurrent mechanisms: habitat fragmentation, commodity-driven land expansion, generational interruption of *pawang* and *ninik-mamak* authority, and state translocation protocols that substitute administrative removal for ritual mediation.

[Section 3.2](#) documented the transformation in Agam and Pasaman. Livestock predation and tiger sightings were reframed from spiritual omen to economic grievance; *harimau tandang* was mobilized as a socio-political narrative locating agency in outside tigers and, by extension, in BKSDA translocations; a generational divide emerged in which elders retain a coexistence idiom while younger residents articulate a media-amplified “tiger

phobia”; and, alongside these, PAGARI emerged as a novel hybrid of local and scientific practices for addressing tiger-related issues, becoming the intermediary through which drone imagery, camera-trap identification, and communal cattle enclosures redefine the operational relationship without fully displacing the older cosmology. These forms coexist in overlapping practice rather than succeeding one another. These findings contribute at the interface the two prior literatures have left obscured. The landscape-ecology literature has treated communities as habitat-model variables; the local-wisdom literature has treated their categories as stable cultural inheritance. The Sumatran material shows instead that categorical operations by communities partly produce the patterns the habitat models describe, and that those operations are conditional and subject to change as landscape and socio-economic structure is transformed, rather than fixed form of relation.

5. Conclusion and policy suggestions

This article has argued that effective conservation in Sumatra’s cosmopolitical frontiers must engage the plurality and situational character of human–tiger relations rather than treat local knowledge as a stable cultural inheritance to be either preserved or overridden. Across the cases examined here, tigers were constituted through overlapping relations of kinship, territorial belonging, moral communication, livestock predation, ecological monitoring, legal protection, and institutional custody. These relations did not form a uniform taxonomy or succeed one another in a linear transition from sacredness to hostility. Their meaning and practical consequences emerged through particular encounters involving families, customary authorities, affected households, conservation officers, NGOs, PAGARI members, and the movements and conduct of individual tigers. State and NGO interventions introduced new forms of evidence, technology, and jurisdiction, but did not necessarily erase existing moral and territorial distinctions. Conservation policy should therefore focus less on recovering or formalising a fixed body of “local wisdom” and more on creating institutional arrangements through which different classifications, forms of evidence, material vulnerabilities, and responsibilities can be negotiated during actual encounters. Based on our ethnographic evidence, we suggest several recommendations as follows:

i) BKSDA and the relevant conservation authorities should adopt a two-track conflict-response protocol that distinguishes encounters involving living tigers from cases involving dead animals. During initial verification, officers should identify and consult the relevant *nagari* authorities, customary representatives, affected households, PAGARI members, and, where locally recognised, *pawang*. For living tigers, local interpretations should be formally documented and considered alongside public-safety, animal-welfare, and ecological assessments before deterrence, capture, or translocation is undertaken. For dead tigers, the protocol should provide a negotiated procedure for forensic documentation and limited veterinary sampling, followed, where legally and technically possible, by culturally acceptable mortuary treatment and burial. (ii) Local government should institute *adat*-recognition mechanisms in spatial planning and operationalise human–tiger conflict compensation schemes that match, within the household’s planning, the cash settlement currently offered by IWT collectors; without such compensation, retaliatory and market-driven killings will continue to converge. (iii) NGOs should replace static “local wisdom” programming with adaptive-agency programming that explicitly recognises the conditional and revisable character of community classifications and supports communities through ontological transition rather than locking them into a curated past; the PAGARI case could serve as an example for benchmarking elsewhere. (iv) Customary institutions

such as *ninik mamak*, *Kepala Jorong*, and *pawang* lineages should be formally recognised as parties to wildlife co-existence governance, with explicit jurisdiction over notification, mediation, and disposition of conflict events in their territory. (v) Landscape-scale conservation programmes corridors should be designed to preserve the ecological basis of animist practice, contiguous forest sufficient for tigers to remain off the village edge, because no policy at the village level can compensate for the loss of it. Collectively, these five recommendations operationalize what we term ontologically-sensitive conservation: a regulatory and programmatic posture that treats community's situated interpretive practices of relating with wildlife as a valid management mode rather than overwriting it with state law.

Conflicts of interest

The author declares no conflict of interest, and the collaborating organizations had no influence over the study design, analysis, interpretation, or publication decisions. The Rimbang Baling material draws on the first author's engagement as an external consultant to UNDP Indonesia; the consultancy has been disclosed to UNDP and did not shape the study's design, analysis, or conclusions.

Author contribution

The first author conceptualised the study, designed its analytical framework, and drafted the manuscript as a whole. The second author was responsible for coordinating and leading the field data collection in Agam and Pasaman and contributed directly to the writing of the ethnographic field-data sections. The remaining co-authors contributed to primary data collection.

Data availability

No datasets were generated or analyzed during the current study.

Declaration of generative AI use

In this work, I used Google's research assistant NotebookLM to support data classification, YouTube news and content mapping, text coding, and the identification of human–tiger conflict distribution in online news and public reports. I also used generative AI tools to assist in translating my selected manual notes taking from literatures, grammar refinement and copy-editing of the manuscript.

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