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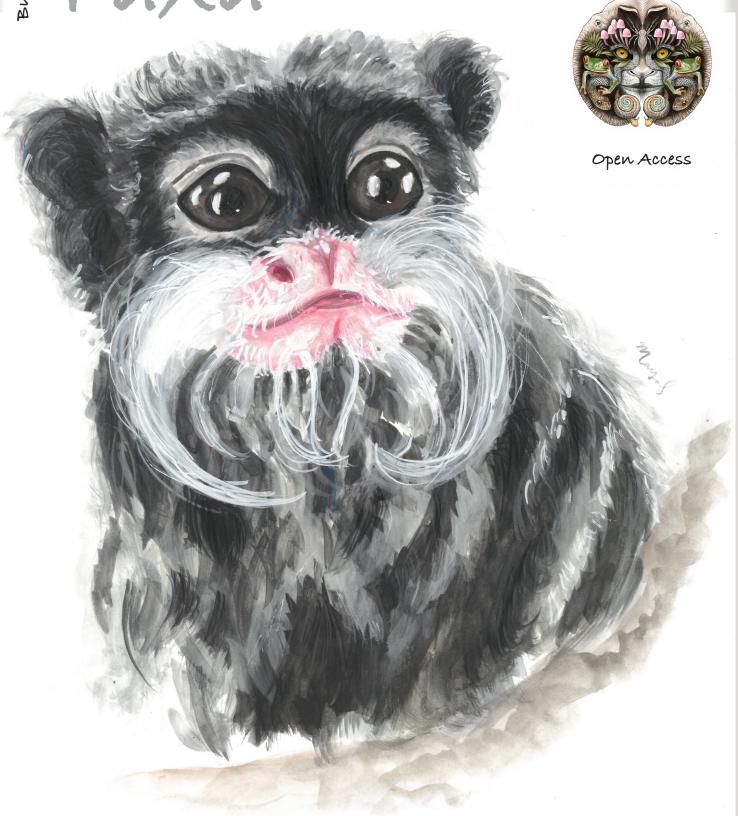
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Cover: Emperor Tamarin Saguinus imperator: a look into a better world through the mustache lens - mixed media illustration. © Maya Santhanakrishnan.

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Understanding Human-Nilgai negative interactions in India: a systematic review through print media report analysis

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Abstract: Despite being one of the most conflict-prone species in India, the Nilgai antelope Boselaphus tragocamelus has received little scientific attention. In this study, we address this knowledge gap by conducting an analysis of secondary data extracted from print media reports on Human-Nilgai negative interactions at the regional scale (tehsils and districts) across different states of India. Our findings revealed notable variations in conflict levels among different states, with Bihar emerging as the most affected (86 tehsils and 22 districts), followed by Madhya Pradesh (34 tehsils; 21 districts) and Uttar Pradesh (33 tehsils; 20 districts). Within Bihar, Muzaffarpur and East Champaran districts stand out for their high conflict levels. Crop raiding by different populations of Nilgai is identified as the primary cause of the negative interaction, with a relative frequency of occurrence of 98%. Attacks on humans by nilgai, although rare, accounted for a relative frequency of occurrence of only 1.2%. Additionally, newspapers reported retaliatory killings, with a relative frequency of occurrence of 0.84%. Between 2018 and 2022, nilgai populations were documented raiding 45 distinct crop types. Analysis of these raids revealed varying frequencies across different crop categories, with vegetables being the most heavily targeted (31%), followed by pulses (22%) and cereals (20%). Our study identifies priority tehsils and districts across different states in the country where studies aiming at nilgai-crop interactions, population dynamics, and movement ecology can be carried out to devise effective mitigation measures.

Keywords: Attacks on humans, Blue Bull, crop raiding, crop types, farmers, human-wildlife conflict, retaliatory killings.

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INTRODUCTION

Human-wildlife negative interactions (HWNI) refers to the challenges that arise when the existence or actions of wildlife present a tangible or perceived threat to humans and/or their interests. This results in disputes among various groups of individuals, causing adverse effects on both humans and wildlife (IUCN SSC HWCTF 2020). As the global population expands and urbanization progresses, wildlife habitats are increasingly endangered by degradation, loss, and fragmentation. The lines separating human settlements from natural habitats are fading, intensifying interactions between humans and wildlife. These negative interactions frequently lead to the loss of crops, livestock & property, and to personal injuries (Karanth & Kudalkar 2017; Holland et al. 2018). These negative interactions also have indirect consequences that are challenging to measure, including declines in psychological well-being and impacts on livelihoods & food security (Barua et al. 2013; Yang et al. 2020). Developing regions of the world, such as southern and southeastern Asia, are particularly vulnerable to this issue (Anand & Radhakrishna 2017).

Wild ungulates have been found to be increasingly involved in raiding crops, damaging properties, attacks on humans, vehicle collisions, and competition with & transmission of diseases to livestock, causing human-ungulate negative interactions across the globe (Chauhan et al. 2009; Kuemmerle et al. 2011; Acevedo et al. 2014; Duarte et al. 2015; Colino-rabanal et al. 2018; Gross et al. 2018). The introduction of the Wildlife Protection Act (1972) and its associated management actions, coupled with incompatible land use practices, have made human-ungulate negative interactions frequent in India (Chauhan & Singh 1990; Chauhan et al. 2009; Bajwa & Chauhan 2019).

Nilgai, also known as Blue Bull *Boselaphus tragocamelus* Pallas, 1766, is an interaction-prone ungulate species in India (Sekhar 1998; Chhangani et al. 2008; Kumar et al. 2017; Bajwa & Chauhan 2019). Although widely distributed (Karanth et al. 2009), there is a scarcity of knowledge on interaction distribution range, and few studies have attempted to address this issue (Chauhan et al. 2010; Chauhan 2011). The species has been found to be increasingly involved in road mishaps, human-human conflicts over their population management practices, and attacks on humans (Dharaiya 2012; Vishnoi 2016; Khan et al. 2019; Gulati et al. 2021; Gorchiya et al. 2022). However, a comprehensive study of the interactions of different populations with humans across their range has not been assessed. The species

is well-known as a crop pest in India (Chauhan & Singh 1990; Goyal & Rajpurohit 2000). Despite this, we have a limited understanding of nilgai-crop interactions, notably it is not known whether some crop types influence human-nilgai negative interactions more than others. In this review, we attempted to address these questions through a systematic survey and analysis of newspaper reports. We first identified different types of human-nilgai negative interactions and their relative frequency of occurrences in India. Similarly, we estimated the relative frequencies of different crop types raided by nilgai in India. The conflict hotspot was identified and mapped at a smaller administrative level based on the reported location and conflict intensity, estimated from various news sources.

Study Area

The present study focuses on analysing print media coverage of human-nilgai negative interactions. The research spans various sub-districts in Indian states where nilgai populations are prevalent, including Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Telangana, Uttarakhand, Uttar Pradesh, and West Bengal (Johnsingh & Manjrekar 2016; Jhala et al. 2019).

These states can be broadly classified based on their geological zones and geographical locations. The classifications include the Shivalik Hills landscape (Himachal Pradesh, Punjab, Haryana, Uttarakhand, and Uttar Pradesh), Gangetic Plains landscape (Uttarakhand, Uttar Pradesh, Bihar), western Indian landscape (Rajasthan and Gujarat), central Indian landscape (Madhya Pradesh, Maharashtra, Chhattisgarh, Jharkhand, and Odisha), Eastern Ghats landscape (Andhra Pradesh, Telangana, and Odisha), and northeastern hills (West Bengal).

The area encompasses diverse biogeographic zones, ranging from the western Himalaya, Punjab, and Gangetic Plains in the north to the desert and semi-arid areas in the west, Deccan Peninsula in the south, and eastern highlands in the east (Menon 2014). The landscapes of these states harbour a unique and rich assemblage of flora and fauna in their protected areas (Jhala et al. 2019).

Certain states in the study area harbour abundant nilgai populations, prevalent not only within designated protected areas but also thriving outside their confines.

MATERIAL AND METHODS

Data collection and analysis

The secondary data on human-nilgai negative interactions in India was obtained through a systematic survey of news articles from 2018-2022, for a total duration of five years (Alexander & Quinn 2008; Athreya et al. 2015). Mainly considering English and Hindi language-based newspapers for data collection, we conducted a literature survey in the news section of the Google search engine using English and Hindi keywords such as 'crop', 'damage', 'loss', 'menace', 'attack', 'farm', and 'farmer' in combination with 'nilgai' or 'blue bull'. Additionally, we included vernacular names of the species that Hindi newspapers might use, such as 'Ghodroj', 'Ghodparas', 'Roz', 'Rojda', and 'Vanroz' as identified in previous references (Chauhan et al. 2010; Menon 2014; The Guardian 2014). The literature survey extended through the last tab.

In the administrative structure of an Indian state, a district serves as a fundamental division, encompassing sub-districts known as tehsils or taluks. A tehsil, in turn, is an administrative unit within the district, constituting an area of land with a central city or town acting as its administrative centre. This region may include additional towns and commonly comprises several villages (https://darpg.gov.in/).

We extracted details on the location of negative interactions as reported in the newspaper, including villages and towns, and subsequently identified and listed the corresponding tehsils for these interaction-affected areas. This process was undertaken by examining reports in newspapers, and further verification and identification were conducted by visiting the official websites of the corresponding districts in the state. Additionally, we utilized the resources available on (https://grammanchitra.gov.in/GM3/) to ensure comprehensive and accurate information on interaction-affected tehsils. In reports where we could obtain information at the district level only, the district name was searched along with the combinations of previous keywords.

Special attention was paid to categorising the conflict. We defined human-nilgai negative interactions here as incidents of crop raids, damage to property, attacks on humans by nilgai, and retaliation against these actions by people (IUCN SSC HWCTF 2020). Crop raiding was defined as damage to standing crops by feeding and trampling (Hill 2017). During this literature survey, we also encountered news reports of nilgai vehicle collisions in the form of either road accidents or railway accidents. Given the definition of human-wildlife negative

interactions (IUCN SSC HWCTF 2020), we considered them as accidents and did not include these reports in our study.

We recorded the crop types affected by nilgai populations in a binary fashion: '1' indicates a raid and '0' no raids. Crops were categorized into five categories: cereals, pulses, vegetables, oil yielding crops, and other cash crops. In instances where nilgai raided multiple crops in different villages within a tehsil, we entered each case separately with corresponding village or town names. For situations where the news article did not specify the crop name or category, we assigned them to an unspecified category.

The relative frequency of each affected crop type was estimated as a percentage by summing up the total raid cases for that specific crop type and dividing it by the total cases for all crop types affected. The result was then multiplied by 100 to obtain the relative frequency in percentage (Table 1). Similarly, the relative frequency for each interaction category was also estimated.

For spatial mapping of negative interactions, districtlevel information was used. We obtained the Survey of India website (https://www.surveyofindia.gov.in/) GIS database at the district level for Indian states. The mapping was conducted at two scales: firstly, at the district level for the most affected state, and secondly, at the country level for our study area. A hot spot map at the district level was created for the most affected state by estimating the crop raiding frequency (CRF) across its various tehsils (Hoare 1999). Here CRF represents the total number of crop raiding incidents or events across various tehsils of a district throughout the entire study period. To prevent the over-reporting of the same incident by different newspapers, we maintained a minimum interval of 11 days between reports from the same tehsil.

At the country level, spatial mapping was conducted by summing the number of interaction-affected tehsils in the corresponding states.

There are two advantages of using this approach. First, it provides a snapshot sample of the spatial distribution of human-nilgai interaction in both inside as well as outside protected area networks across a relatively large geographic area. Second, in India, states such as Gujarat, Rajasthan, Haryana, and Punjab have no compensation scheme for crop raids by ungulates and hence the interaction records (Karanth et al. 2018; Bajwa & Chauhan 2019). In this way, data were extracted and analysed from online editions of 13 publications, including 10 Hindi and three English-language newspapers.

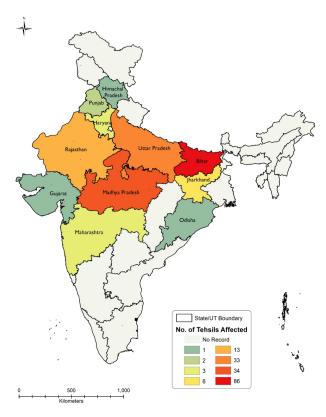


Figure 1. Distribution of human-nilgai negative interaction cases across Indian states based on the number of tehsils affected.

RESULTS

Spatial distribution of interactions in the country

Different newspapers reported a total of 597 interaction cases in India, spanning 73 districts, encompassing 183 tehsils across 11 states within the timeframe of 2018-2022. However, the number of conflict cases in each of these tehsils and states suggests that its severity is different across them.

As depicted in Figure (1) and Table (2), Bihar emerged as the most frequently affected state, with 22 of 38 districts affected, constituting approximately 58% of all districts. 86 tehsils were affected, or approximately 47% of the total (183) affected in the country. Madhya Pradesh and Uttar Pradesh ranked second and third in the list of affected states.

Madhya Pradesh state has been witnessing the impact across 21 out of its 53 districts, affecting a total of 34 tehsils. Similarly, Uttar Pradesh is facing challenges, with 20 out of 75 districts, encompassing 33 affected tehsils within the state. Further details about the situation in other states are outlined in Table (2).

We assessed the intensity of conflict by calculating the CRF for various districts in Indian states (Table 2). Given that Bihar has the highest number of affected

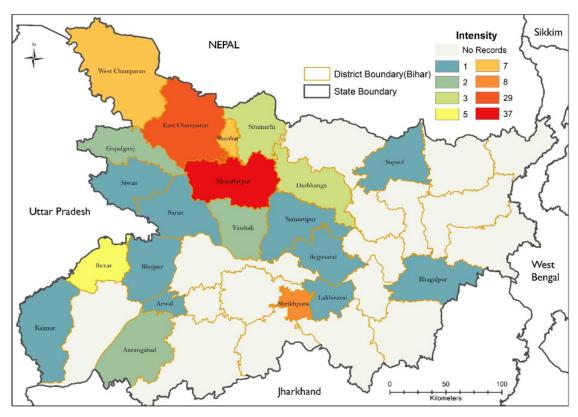


Figure 2. Crop raiding frequency (Intensity) of nilgai across different districts of Bihar state.

Table 1. Various crops raided by nilgai with their relative frequencies of raid.

Crop categories	Crop types affected	Relative frequencies of raid (%)
	Unspecified vegetables	7.55
	Potato	6.21
	Cauliflower	2.72
	Tomato	2.11
	Brinjal	1.85
	Coriander	1.85
	Onion	1.80
	Cabbage	1.39
Vegetables	Ash gourd	1.13
vegetables	Bitter gourd	1.13
	Fenugreek	0.92
	Garlic	0.62
	Sweet potato	0.56
	Chilli	0.56
	Pointed gourd	0.41
	Turmeric	0.26
	Okra	0.05
	Ridge gourd	0.05
	Chickpea	7.40
	Pigeon pea	4.42
	Pea	3.80
	Red lentil	2.72
Pulses	Unspecified pulses	1.90
	Green gram	0.72
	Lobia pulse	0.46
	Grass pea	0.41
	Wheat	10.73
	Maize	5.34
Cereals	Paddy	3.24
	Sorghum	0.31
	Pearl millet	0.31
Unspecified	Unspecified Crops	10.84
	Banana	1.64
	Mango plants	1.54
	Sugarcane	1.39
	Opium	1.23
Other cash crops	Cotton	1.23
	Guava	1.18
	Papaya	0.36
	Lychee plants	0.05
	Mustard	4.88
	Soyabean	1.23
Oil yielding crops	Unspecified oilseeds	0.67
	Linseed	0.62
	Ground nut	0.21
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tehsils, we generated a hot spot map using the CRF values assigned to its districts (Figure 2). Our finding revealed that both Muzaffarpur and eastern Champaran have been experiencing a higher intensity of conflict compared to other districts in Bihar, with all of their tehsils affected.

Relative frequency of different conflict categories

Out of 597 conflict cases reported in India, 98% (585 cases) were attributed to crop raids by nilgai. Attacks on humans accounted for 1.2% (seven cases), while 0.84% (five cases) involved the retaliatory killing of nilgai by humans (Figure 3). Notably, our survey did not uncover any news reports of property damage caused by nilgai during the specified period.

Relative frequency of different crops raided by nilgai

We found that different nilgai populations have damaged 45 crop types in India. To gain a deeper understanding of this impact, we categorized these crop types into specific crop categories. Among these crop categories, vegetables had the highest relative frequency of raid (32%) by nilgai (Figure 4). A total of 18 crop types were damaged in this category, with relatively frequent damage observed in two crop types: unspecified vegetables (7.6%) and potato crops (6.2%) (Table 1).

After vegetables, pulses were the second most frequently raided (22%) category. Although eight crop types were damaged in this category, Chickpea, Pigeon Pea, and Pea were the three crop types particularly vulnerable to nilgai raids. Cereals ranked third (20%) in the most affected crop category, with wheat and maize being crop types frequently sustained nilgai raids.

Oil yielding crops were least raided category, accounting for only 7.6%. Further details on other crop categories and their types affected are given in Table 1.

Attacks on humans by nilgai

We found only seven news reports of nilgai attacks on humans during our study period, showing the rarity of such attacks. Five people died, and three were injured in these attacks. The victims were farmers. Most of them were working on the farm, while one victim was guarding the crops at night. These news reports did not specify whether the attack was intentional or in self-defence, leaving uncertainty about the motivations behind these rare occurrences.

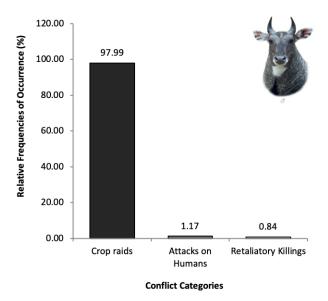


Figure 3. Relative frequency of occurrence (%) of different conflict categories.

Retaliatory killing of nilgai by humans

Newspapers reported five incidents of retaliatory killing of the species by humans. Farmers retaliated against frequent crop raids by fencing their farms with high-tension electric wires or by shooting the animal while raiding crops, which led to nilgai deaths.

DISCUSSION

This was the first attempt to map and assess the spatial distribution of human-nilgai negative interactions in India at the district and smaller administrative scales. Our findings revealed that, as compared to other states in India, Bihar has faced relatively severe human-nilgai conflict, with most of its districts and tehsils being affected. This finding was not surprising, because due to the severity of this issue the state culled 4,729 nilgais during 2016-2019 (Khan 2021). Madhya Pradesh and Uttar Pradesh ranked second and third, respectively. A total of 3,278 cases of crop raids by nilgai were reported during 2009-2013 in Madhya Pradesh, and the state government had to pay 1.2 crore Indian Rupees (US\$ 146,568) as compensation to victims (Babbar et al. 2022). Previous studies suggest that Uttar Pradesh has the largest population of nilgai (2,54,449) in India (Chauhan 2011). This state has been facing crop raiding by nilgai since the 1990s (Qureshi 1991). In 1995 and 1996, considering the severity of crop damage by nilgai, the government issued a permission letter and eliminated 270 individuals in the Etah district of the state (Chauhan

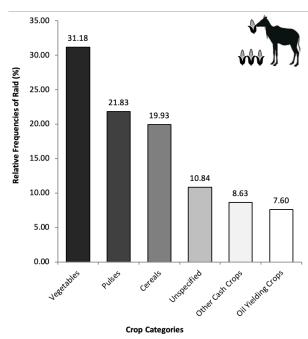


Figure 4. Relative frequency (%) of all crop categories raided by Nilgai.

et al. 2010).

The non-existence of studies on the nilgai population trend coupled with land use land cover dynamics in these three states has hampered our understanding of why these states have been facing a relatively higher intensity of conflict. Interestingly states such as Rajasthan, Punjab, and Haryana had fewer cases of conflict, despite previous studies suggesting otherwise (Chopra & Rai 2009; Meena et al. 2014; Johnson et al. 2018; Bajwa & Chauhan 2019; Kumar et al. 2022). One possible explanation could be that these states are dominated by the Bishnoi community, who tend to tolerate nilgai raids rather than reporting them, due to their cultural and religious sentiments (Sankar & Goyal 2004). Another factor could be under-reporting of conflict by print media, attributed to the lack of public interest in incidents of crop and property damage caused by wildlife (Neupane et al. 2013). Even in the case of Bihar state, the frequency of crop raids by nilgai in different districts is almost negligible compared to findings in previous studies (Bayani et al. 2016; Bayani & Watve 2016). In many parts of India, crop raiding by nilgai has become so frequent that print media rarely cover all incidents unless they become topics of debate among politicians or provoke mass protests by victims (Vishnoi 2016; Times of India 2024).

Under-reporting by print media has already been documented in previous studies (Neupane et al. 2013; Paudel et al. 2022). Our results suggest that crop raiding

Table 2. List of affected districts across Indian states, as reported by newspapers, along with its corresponding crop raiding frequency estimates (CRF).

State	District	CRF
Bihar	Arwal	1
Bihar	Aurangabad	2
Bihar	Begusarai	1
Bihar	Bhagalpur	1
Bihar	Bhojpur	1
Bihar	Buxar	5
Bihar	Darbhanga	3
Bihar	East Champaran	29
Bihar	Gopalganj	2
Bihar	Kaimur	1
Bihar	Lakhisarai	1
Bihar	Muzaffarpur	37
Bihar	Samastipur	1
Bihar	Saran	1
Bihar	Sheikhpura	8
Bihar	Sheohar	7
Bihar	Sitamarhi	3
Bihar	Siwan	1
Bihar	Supaul	1
Bihar	Vaishali	2
Bihar	West Champaran	7
Madhya Pradesh	Dhar	5
Madhya Pradesh	Gwalior	3
Madhya Pradesh	Sheopur	7
Madhya Pradesh	Raisen	1
Madhya Pradesh	Ratlam	7
Madhya Pradesh	Ujjain	2
Madhya Pradesh	Sagar	1
Madhya Pradesh	Damoh	1
Madhya Pradesh	Indore	1
Madhya Pradesh	Neemuch	3
Madhya Pradesh	Dewas	1
Madhya Pradesh	Shivpuri	1
Madhya Pradesh	Mandsaur	3
Madhya Pradesh	Tikamgarh	1
Madhya Pradesh	Jhabua	2

State	District	CRF
Madhya Pradesh	Shajapur	1
Madhya Pradesh	Rewa	1
Uttar Pradesh	Deoria	1
Uttar Pradesh	Azamgarh	8
Uttar Pradesh	Saharanpur	3
Uttar Pradesh	Gorakhpur	2
Uttar Pradesh	Basti	1
Uttar Pradesh	Kannauj	1
Uttar Pradesh	Bhadohi	2
Uttar Pradesh	Prayagraj	4
Uttar Pradesh	Moradabad	3
Uttar Pradesh	Aligarh	1
Uttar Pradesh	Lalitpur	2
Uttar Pradesh	Meerut	1
Uttar Pradesh	Maharajganj	2
Uttar Pradesh	Unnao	1
Uttar Pradesh	Hathras	1
Uttar Pradesh	Ghazipur	1
Rajasthan	Bhilwara	4
Rajasthan	Chittorgarh	2
Rajasthan	Jalore	1
Rajasthan	Pratapgarh	2
Rajasthan	Nagaur	1
Rajasthan	Jhalawar	1
Jharkhand	Palamu	2
Jharkhand	Garhwa	3
Jharkhand	Koderma	1
Maharashtra	Wardha	1
Maharashtra	Akola	1
Maharashtra	Chandrapur	1
Haryana	Palwal	2
Haryana	Fatehabad	1
Punjab	Pathankot	1
Punjab	Rupnagar/Ropar	1
Odisha	Sundargarh	1
Gujarat	Surendranagar	1

by nilgai is a primary cause of negative interaction with humans across its distribution range, which corresponds to previous findings (Sekhar 1998; Chhangani et al 2008; Kumar et al. 2017; Bajwa & Chauhan 2019). Given India's status as an agrarian country, this issue presents a significant threat to the livelihoods of farmers and to the

food security of subsistence farmers in these affected states (Barua et al. 2013; Rathi et al. 2020). It was found that in the study area, nilgai raided 45 types of crops in a time frame of five years. Nilgai, being a mixed feeder (Hines 2016) weighing over 250 kg (Sheffield et al. 1983), is capable of causing extensive damage to



standing crops and orchards by selective feeding and trampling. However, vegetables, pulses, and cereals were raided the most among different crop categories. These results correspond to the previous findings where nilgai demonstrated preferences towards vegetable, pulse, and cereal crops (Aryal 2007; Kumar et al. 2017, 2022; Khanal et al. 2018). One possible explanation could be that due to their higher nutritional value and palatability, these crops may have preferentially foraged over others (Biru & Bekele 2012).

During our literature survey, we found that many newspapers reported escalating nilgai raids, leading farmers in severely affected areas to increasingly avoid cultivating vegetables and pulses, highlighting a pressing need for effective management. Our results indicate that attacks on humans by nilgai are rare, probably due to their timid nature. Farmers are particularly vulnerable to such attacks while guarding their crops or driving away the animal due to its sheer size and agility. Our study revealed instances of retaliatory killing of nilgai through methods such as electrocution and shooting. This finding corresponds to a previous study where villagers poisoned nilgais to protect their crops (Qureshi 1991).

Although this approach to studying human-nilgai conflict is advantageous in quickly covering a relatively large area and obtaining data from areas without records, it has limitations. Due to the incomplete media coverage, we could not obtain any data on some other crucial aspects of this conflict, such as population estimates of nilgai in affected areas, their phenological preferences for different crop types, sex associated with crop raiding, temporal patterns of crop raids, extent of damage inflicted on different crop types and the motivations behind their attacks on humans. Our findings have revealed that there is an urgent need to conduct studies on the population dynamics of nilgai in different affected tehsils of Bihar, Madhya Pradesh, and Uttar Pradesh states. Based on the intensity of negative interactions (CRF), focal districts and its corresponding tehsils can be chosen from the list we have provided in this article (see supplementary Table 1 for details). Studies addressing nilgai-crop interactions would be critical in identifying high-risk crops and formulating appropriate mitigation measures. Lastly, Studies on their habitat and movement ecology in these affected tehsils using radio telemetry will enable pinpointing high-risk zones, understanding habitat preferences, and developing targeted strategies for mitigation, promoting coexistence through proactive management based on real-time insights.

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Supplementary Table 1. List of human-nilgai negative interaction affected tehsils and its corresponding locations across Indian states.

State	Tehsil (Village/Town if Any)
Bihar	Ariyari (Chandi)
Bihar	Barbigha (Maldah)
Bihar	Barauli (Diara)
Bihar	Aurai
Bihar	Bandra
Bihar	Bochahan
Bihar	Benipur (Mahinam)
Bihar	Alinagar (Motipur)
Bihar	Bhagwanpur (Mahdauli)
Bihar	Bettiah (Gobardhana)
Bihar	Bagaha (Bagaha-2/Tharuhat)
Bihar	Chanan/Bannu Bagicha (Bhalui)
Bihar	Buxar (Gobindapur)
Bihar	Bhagwanpur
Bihar	Aurangabad (Nima)
Bihar	Bhitaha (Bhitaha)
Bihar	Areraj
Bihar	Adapur
Bihar	Chakia
Bihar	Bankatwa
Bihar	Banjaria
Bihar	Bidupur (Saidpur Ganesh)
Bihar	Chand
Bihar	Chauradano
Bihar	Chewara (Karande)
Bihar	Chiraiya
Bihar	Deo (Belsara)
Bihar	Dhaka
Bihar	Dumraon
Bihar	Gaighat
Bihar	Gaunaha (Parsauni)
Bihar	Ghat Kushumbha (Gagaur)
Bihar	Ghorasahan
Bihar	Gopalganj (Kararia)
Bihar	Harsidhi
Bihar	Hasanpura
Bihar	Jagdishpur
Bihar	Jale (Jale)
Bihar	Kahalgaon/colgong (Kasdi)
Bihar	Kaler (Sohsa)

State	Tehsil (Village/Town if Any)
Bihar	Kalyanpur
Bihar	Kanti
Bihar	Katra
Bihar	Kesaria
Bihar	Kesath (Kesath)
Bihar	Khanpur (Khairi)
Bihar	Kotwa
Bihar	Kurhani
Bihar	Madhuban (Rupani)
Bihar	Marwan
Bihar	Mehsi
Bihar	Minapur
Bihar	Motihari
Bihar	Motipur
Bihar	Muraul
Bihar	Mushahari
Bihar	Nawanagar (Devpura tola)
Bihar	Paharpur
Bihar	Pakaridayal
Bihar	Paroo
Bihar	Patahi
Bihar	Phenhara (Marpa Mohan)
Bihar	Piprahi
Bihar	Piprakothi
Bihar	Pupri (Chainpur)
Bihar	Purnahiya (Bedaul)
Bihar	Ramgarhwa
Bihar	Ramnagar (Bhaval)
Bihar	Raxaul
Bihar	Riga
Bihar	Runnisaidpur (Madhaul)
Bihar	Sahebganj
Bihar	Sakra
Bihar	Sangrampur
Bihar	Saraiya
Bihar	Sheikhpura (Purena)
Bihar	Shekhopur Sarai (Nimi)
Bihar	Simri (Dumri)
Bihar	Sonepur (Milli)
Bihar	Sugauli

State	Tehsil (Village/Town if Any)
Bihar	Supaul (Lourdh)
Bihar	Tariyani
Bihar	Tetaria
Bihar	Thakraha (Thakraha)
Bihar	Turkaulia
Bihar	Beldaur (Bahiyar)
Madhya Pradesh	Badnawar (Bangda)
Madhya Pradesh	Bhitarwar (Ladhwaya)
Madhya Pradesh	Baroda (Baroda)
Madhya Pradesh	Begumganj (Madhiya Gusain)
Madhya Pradesh	Alot
Madhya Pradesh	Badnagar
Madhya Pradesh	Dabra (Kalyani)
Madhya Pradesh	Deori (Dongar Salaiya)
Madhya Pradesh	Dhar (Anarad)
Madhya Pradesh	Ghatigaon (Ghatigaon)
Madhya Pradesh	Hatta (Chauraiya)
Madhya Pradesh	Indore (Pipalda)
Madhya Pradesh	Jaora
Madhya Pradesh	Jawad (Kesarpura)
Madhya Pradesh	Kannod (Sundrel)
Madhya Pradesh	Karahal (Hirapur)
Madhya Pradesh	Karera (Jujhai)
Madhya Pradesh	Malhargarh
Madhya Pradesh	Manasa (Chukni)
Madhya Pradesh	Nagda-Khachrod (Pipaliya Molu)
Madhya Pradesh	Palera (Jewra Maura)
Madhya Pradesh	Petlawad (Jhakanwada)
Madhya Pradesh	Pipaloda (Machun)
Madhya Pradesh	Ratlam Rural
Madhya Pradesh	Sailana
Madhya Pradesh	Sardarpur (Piparni)
Madhya Pradesh	Shajapur (Shajapur)
Madhya Pradesh	Sheopur (Manpur)
Madhya Pradesh	Singoli (Jaat)
Madhya Pradesh	Teonthar (Chakghat)
Madhya Pradesh	Vijaypur (Ochha)
Madhya Pradesh	Chhatarpur (Bandhi Salaiya)
Madhya Pradesh	Jaura/Joura (Chanchul)
Madhya Pradesh	Shyampur (Lodhipura)
Uttar Pradesh	Barhaj (Bhulaipur)
Uttar Pradesh	Azamgarh (Sathiaon)

State	Tehsil (Village/Town if Any)
Uttar Pradesh	Budhanpur (Atraulia)
Uttar Pradesh	Behat (Naugawan)
Uttar Pradesh	Bansgaon (Gagaha)
Uttar Pradesh	Campierganj (Pipiganj)
Uttar Pradesh	Basti (Kanaila)
Uttar Pradesh	Chibramau (Chachiyapur)
Uttar Pradesh	Gyanpur (Babusarai)
Uttar Pradesh	Handia (Tela)
Uttar Pradesh	Kanth (Kanth)
Uttar Pradesh	Karchhana (Panasa)
Uttar Pradesh	Koil (Vijaigarh)
Uttar Pradesh	Madawra/Mandawara (Patna)
Uttar Pradesh	Meerut (Janikhurd)
Uttar Pradesh	Mehnagar (Mehnagar)
Uttar Pradesh	Mehrauni/Mahroni (Dongra Khurd)
Uttar Pradesh	Moradabad (Mundapandey)
Uttar Pradesh	Nakur (Nasrullagarh)
Uttar Pradesh	Nautanwa (Parsamalik)
Uttar Pradesh	Nizamabad (Tahbarpur)
Uttar Pradesh	Phulpur (Sahajipur)
Uttar Pradesh	Purwa (Purwa)
Uttar Pradesh	Rampur Maniharan (Dalheri)
Uttar Pradesh	Sadabad (Bisawar)
Uttar Pradesh	Sagri (Bilariaganj)
Uttar Pradesh	Seorai (Kutubpur)
Uttar Pradesh	Soraon (Shringverpur)
Uttar Pradesh	Thakurdwara (Thakurdwara)
Uttar Pradesh	Garh Mukteshwar (Paswada)
Uttar Pradesh	Kaimganj(Khargapur)
Uttar Pradesh	Hamirpur (Bharua Sumerpur)
Uttar Pradesh	Bhogaon (Dikhatmai)
Rajasthan	Bijoliya
Rajasthan	Begun
Rajasthan	Ahore (Paota)
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