

Human-Wildlife Conflict in Karnataka



The Need for a Human-Wildlife Conflict Compensation Law

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Abbreviations and Acronyms

ACF: Assistant Conservator of Forests
APCCF: Additional Principal Chief Conservator of Forests
CCF: Chief Conservator of Forests
CF: Conservator of Forests
DCF: Deputy Conservator of Forests
DRFO: Deputy Range Forest Officer
DDO: Drawing and Disbursing Office
FCA: Forest Conservation Act, 1980
FEE: Forest, Environment, Ecology Department
GPS: Global Positioning System
HOFF: Head of Forest Force
HWC: Human-Wildlife Conflict
IFS: Indian Forest Service
IUCN: International Union for Conservation of Nature
ODK: Open Data Kit
PA: Protected Area
PCCF: Principal Chief Conservator of Forests
RFO: Range Forest Officer
RTC: Record of Rights, Tenancy and Crops
WPA: Wildlife Protection Act, 1972

Cover Photograph by Avijan Saha

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Understanding Human-Wildlife Conflict

Global Overview of Human-Wildlife Interactions

People and wildlife have coexisted for thousands of years across the planet. A majority of the interactions between people and wildlife tend to be neutral or positive, although negative interactions can pose a threat to human livelihood and well-being. Negative interactions, referred to as human-wildlife conflict (HWC) incidents, continue to remain a persistent conservation challenge with costs and consequences to both people and wildlife¹. Apart from financial and physical costs, such incidents also result in psychological damage. Some of the hidden, often overlooked impacts of conflict include low attendance in school, rising food insecurity, mental health risks, and abandonment of agricultural land followed by rising urban migration^{2,3}.

Interactions leading to conflict can be addressed in many ways, most of which emphasise cohabitation of space between humans and wildlife⁴. In recent years, some projects addressing human-wildlife interactions have seen great progress. They often involve setting aside land for wild animals, and encouraging tolerance of wildlife, and coexistence of humans and wildlife⁵. Often, the financial and physical costs of conflict are addressed through the provision of monetary compensation and insurance schemes^{6,7}. A recent study estimated that the global annual expenditure amongst nations for compensation towards human-wildlife interactions resulting in conflict was \$222 million⁷. This study also showed that conflict research and funding for compensation schemes was greatest in Europe.

Understanding Human-Wildlife Conflict

Wildlife Conservation in India

As one of the 17 mega-diversity nations, India hosts more than a billion people alongside numerous species of birds, mammals, and other taxa. Amongst the many landmark events in the history of wildlife conservation are the establishment of two acts - the Wildlife Protection Act (WPA) of 1972, and the Forest Conservation Act (FCA) of 1980. The WPA⁸ is classified into schedules with varying degrees of protection for the conservation of wildlife, making the harming of higher-order species a punishable offence. Eight years following the WPA, the Forest Conservation Act was passed to conserve the forests of the country. To reduce human footprint and natural resource exploitation, numerous Protected Areas (PAs) were established. With a 30% increase in the protected area network from the beginning of the millennium, the Ministry of Environment, Forest, and Climate Change states that India currently has more than 700 protected areas, as 104 National Parks (IUCN Category II), 544 Wildlife Sanctuaries (IUCN Category IV), 77 Conservation Reserves, and 46 Community Reserves (IUCN Category VI).

Protected areas comprise less than 5% of the country's landmass, and are mostly fragmented and disjunct. They are often surrounded by densely populated settlements, providing an opportunity for numerous human-wildlife interactions resulting in conflict. Negative interactions usually occur in the form of crop and property damage, livestock injury or death, and human injury or death. Crop and property damage are the most prevalent forms of conflict, followed by livestock loss. Incidents resulting in human injury and death occur less often^{1,2,9,10}. The infrequency of direct conflict with humans could be a contributing factor to the persistence of people's traditional tolerance towards wildlife. However, retaliation towards wildlife in the form of physical violence, poisoning, and electrocution does occur, which may pose a risk to their continued presence in the landscape.

Understanding Human-Wildlife Conflict

All-India Conflict Assessments

Numerous field-based studies covering multiple stakeholders have provided some understanding of this complex issue in India. Local communities were surveyed to study the impact of such interactions and understand the human dimensions of conflict. Research across species and sites (both within and outside protected areas) in India have focused on understanding conflict-prone species, history of interactions, ex-gratia payments and compensation processes, mitigation techniques deployed, local stakeholder perceptions, the influence of social capital, and use of natural resources. Such studies have provided insights into the socio-economic, geopolitical, anthropogenic, and ecological drivers of this multifaceted problem^{9,11-14}.

A few studies have examined the impact of human-wildlife interactions on gender, exposing differences in willingness to participate in mitigation schemes, vulnerability to conflict, and related psychological and physical impacts^{15,16}. Others have explored human-wildlife conflict-related policy in the country¹⁰, the effectiveness of compensation schemes¹⁷, mitigation measures, or have tried to predict future interactions leading to conflict¹⁸. Many of these findings have influenced policy directives and have helped in the formulation of conservation interventions¹⁹.

Understanding Human-Wildlife Conflict

Mitigation

Human-wildlife interactions leading to conflict can often be managed through a variety of management strategies, both proactive and reactive. They have been implemented in conflict-prone regions across the world, with varying degrees of success^{4,7}. Preventive strategies are aimed at avoiding conflict, while protection strategies are used to deal with the outcome of the conflict. These strategies largely deal with wildlife management, the stakeholders, livestock management, and land management. This usually involves raising community awareness at different levels, largely through education, training, and outreach programs⁴. People living around protected areas protect crops, livestock, and property from wild animals by employing measures such as fencing and guarding of property. Compensation schemes, both direct and indirect, are often employed by the state or by stakeholders invested in the preservation of wildlife living around human-dominated settlements. Such schemes carried out in combination with insurance schemes and community-based measures can be effective in tackling the issue of retaliation against wildlife.

The use of mitigation strategies is largely attributed to cultural tolerance as well as a strict ban on hunting or retaliatory killing of wildlife according to the WPA 1972. An assessment of mitigation strategies by local communities around 11 protected areas in India identified at least twelve deployed strategies⁹. Night-time watching, use of scare devices, and fencing were the most commonly used. The extent of deployment of mitigation measures was attributed to the distance from the household to the protected area, previous history of wildlife-related losses, and the type of crops grown or livestock owned. This study highlighted the ineffectiveness of a single strategy across multiple sites and called for the identification of site-specific mitigation measures⁹. These strategies would also benefit from open interactions between stakeholders such as the local community, protected area management, and scientists.

Other studies explore the use of repellents against specific species, such as elephants, through the use of threatening sounds, pepper dung, chilli ropes, beehive fences etc, as well as more proactive measures such as translocations and drives using trained elephants^{21,22}. Changes in cropping patterns and types of crops grown to deter crop depredation have also been suggested²². Mitigation strategies must be designed in a manner that reduces the number of interactions leading to conflict, and alleviates the extent of losses incurred, while also minimising retaliation against the wildlife species held responsible for the conflict.

Understanding Human-Wildlife Conflict

Compensation

In India, losses resulting from human-wildlife conflict are generally financially compensated. A comprehensive review of data available on compensation (or ex-gratia payment) policy, payments and procedures in India showed that in the year 2012-13, there were 78,656 wildlife-related loss incidents reported from 18 out of the country's 29 states¹⁰. The majority of the reported incidents were related to crop damage and property damage (73.4%).

States allocated compensation based on predetermined crop prices, an amount per hectare lost or had a maximum payment regardless of damage extent. Similar policies were found for cases of property damage, with the definition of 'property' varying by state. States had different reporting times for damages (if any), ranging from 48 hours to 90 days, and compensation was largely provided by the state forest departments.

Livestock depredation incidents made up 20% of the total in 2012-13 and were compensated for by 26 states. However, only a few states made a clear distinction in policy between compensation for 'injury' and 'death' of livestock. Definitions of which species constituted livestock were also debated, and states either provided clear animal lists or had a generic policy. Most states did not distinguish compensation amounts with regards to the age, utility, or breed of livestock. Compensation amounts were decided on the basis of market rates, with either minimum or maximum valuations in place, or were capped to a percentage of the assessed loss.

States with a higher number of protected areas, area of agricultural land, and area of forested land showed a greater number of cases and compensation. Incidents of human injury and death made up 6.6% of the total incidents and had the broadest coverage in terms of policy amongst states. Many states provided for compensation assessment on the basis of injury, grievous injury, and permanent disability. However, only a few states made a distinction between payments for minors and adults. Compensation could include hospitalisation costs as well. Assessments of injuries or death were carried out by different officers or specific committees in different states, with different requirements of proof for each incident. Reporting times of the conflict varied widely, and states often did not have a policy regarding a timely compensation payment.

Understanding Human-Wildlife Conflict

A recent study highlighted that conflict incidents were likely to be underreported due to inconsistent policies paperwork, high transaction costs involved and other bureaucratic hurdles. The study also found inconsistencies among states regarding the reporting time for conflict, the agency or department responsible for the assessment of damages, and the amount of time taken for the processing of the claims. The study revealed that the process of conflict reporting and compensation was quite decentralized, with state-level variations in procedures and policies, and a lack of a uniform national compensation policy¹⁰.

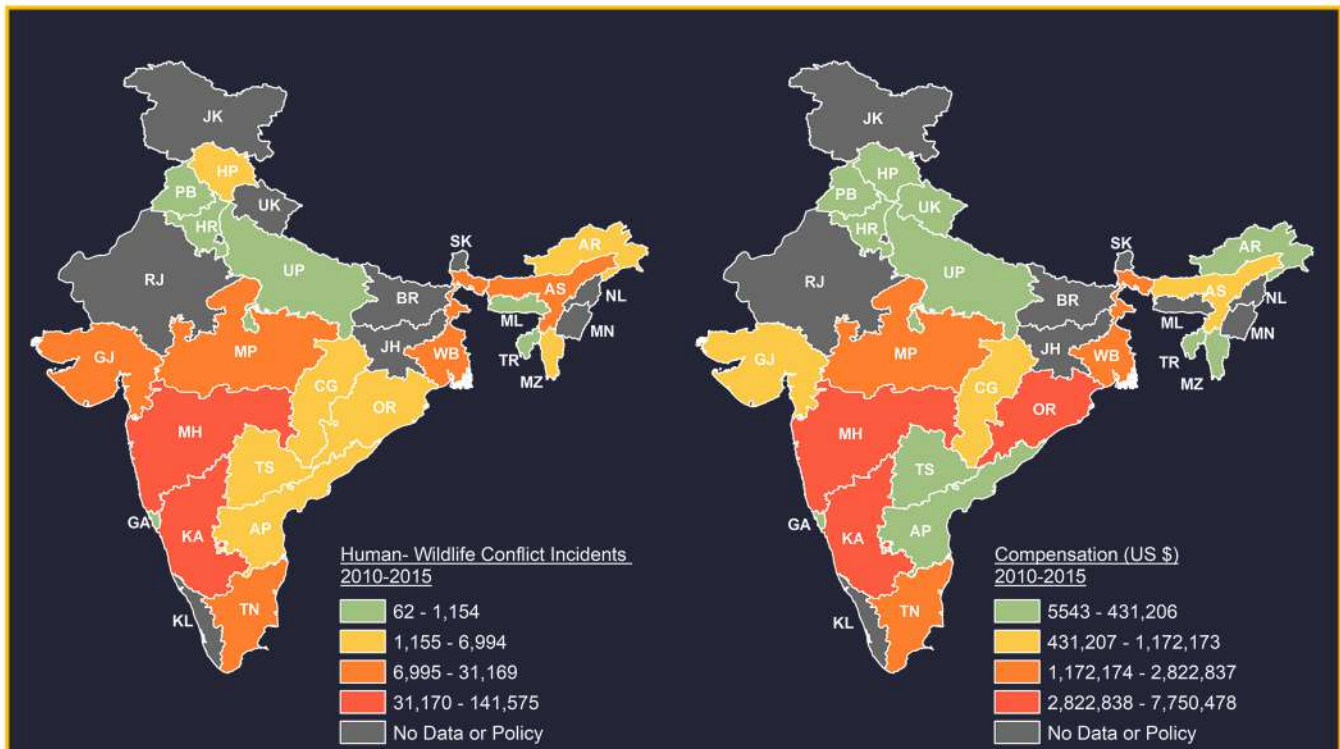


Fig 1: India records an average of over 80,000 recorded incidents of human-wildlife conflict each year. In 2012-2013, the state of Karnataka recorded over 36,000 incidents, with compensation payments totalling US \$1,956,115. Maps used from Karanth et al. 2018.

Understanding Human-Wildlife Conflict

Wildlife Species

Numerous wildlife species have been involved in human-wildlife conflict incidents, with certain species such as elephants largely responsible for cases of reported crop damage in states like Karnataka and Assam, and ungulates responsible for the same in Gujarat and Madhya Pradesh. Research into conflict-prone species shows that although a few charismatic species are often disproportionately targeted, there are over 88 species in nine taxonomic groups that have been reported to cause damage or loss. Most of these species were found to be carnivores and rodents, but ungulates also feature on the list. The top conflict-prone species were reported as elephant, leopard, tiger, and rhesus macaque²³.

States in India have different policies regarding conflict-prone wildlife, and which damage-causing species can be compensated for. Species listed under Schedules I - IV of the Wildlife Protection Act of 1972 was commonly used by states as a broad definition of what constitutes as 'wildlife', and therefore eligible for compensation. States also used the term 'wild animals', without providing any definitive species list, or used non-exhaustive lists, often leaving officers on the ground to interpret their policies. The species and their inclusion also depended on whether the conflict caused was crop or property damage, livestock depredation, or human injury and death. States often specifically mentioned that injury caused by species such as monkeys and snakes could not be compensated for¹⁰.

Studies have also found that policy mentions had a bias towards larger species such as tigers, leopards, elephants, bears, wolves, and hyenas. Wild pigs were often excluded from lists, and along with the nilgai, were subject to state notices allowing their culling in problem-areas¹⁰. Human-wildlife interaction research is often focused only on a few species, or on sporadic but catastrophic damage events or areas. However, the frequency of low-intensity conflict interactions caused by lesser studied species can often result in a greater amount of loss over time, in comparison to that by larger mammals²³.

Conservation Interventions

The Wild Seve Program

Wild Seve is a program designed and implemented in 2015 around Nagarahole and Bandipur by Dr Krithi K. Karanth and the Centre for Wildlife Studies. This program assists families with filing claims for compensation of losses incurred due to human-wildlife conflict. The program is operational in village settlements around two premier tiger reserves in the state of Karnataka - Nagarahole and Bandipur.

Since its inception, Wild Seve has assisted in filing over 14,000 claims and helped over 6000 families facing conflict. Wild Seve has designed a user-friendly mobile application using Open Data Kit (ODK) to improve monitoring efficiency, minimize transcription errors, and simplify data collection, and analysis. The Wild Seve team serves as an intermediary between families suffering a loss due to human-wildlife conflict incidents and the government's forest and revenue departments. By filing compensation (ex-gratia) claims, and following up on case progress on behalf of the affected families, their staff reduce the time and travel costs associated with follow-up trips to government offices.

Wild Seve removes all transaction costs for the farmer, makes compensation procedures more transparent and increases reporting rates. Wild Seve demonstrates how technology can be leveraged effectively to tackle major conservation challenges. The program has reduced processing times for compensation, thereby hoping to reduce animosity towards wildlife and protected area managers among the claimants, and fostering tolerance among local communities¹⁰. This improvement in efficiency and response time is especially important in conflict hotspots, and this in turn improves people's attitudes towards both the wildlife and the government.

Conservation Interventions

Early Warning Systems in Valparai and Hassan

The Anamalai hills landscape around the Valparai plateau of Tamil Nadu is a gradient of scrub forests in the north and high elevation shola-grassland mosaics in the east. The once-forested landscape is fragmented by coffee and tea plantations, leaving few forest patches. Anamalai hills host a large population of wild elephants²⁴. People living in this landscape frequently encounter elephants using these plantations, resulting in crop damage, property damage, and numerous instances of human injury and death. Elephant interactions often caused distress amongst the residents and resulted in retaliation against the elephants.

Dr M. Ananda Kumar of the Nature Conservation Foundation initiated the Elephant Information Network, an early-warning system. This program warned people in advance to the presence of elephants through media coverage on local radio and television. With increased mobile usage and widened network coverage, the program moved to use text-based SMS alerts to warn all registered users. Currently, the program also uses a mobile-operated 'elephant-alert' indicator, a red LED light hosted in specific locations and visible at great distances²⁴.

After the program was in place, human deaths were found to be reduced from three to one per year. This program was a success because of its innovative use of technology and the local community to warn each other of possible human-elephant interactions. In the district of Hassan, Karnataka, where encounters with elephants are increasing, a similar model has been adopted and implemented to mitigate human-elephant encounters.

The high incidence of human-wildlife conflict in a complex and mega-diverse country like India needs to be addressed urgently and effectively. Stakeholders need to come together and collaboratively, through open dialogue discuss bold, innovative solutions to minimize human-wildlife conflicts. As compensation (ex-gratia) payment policies are already operational across most states, its effective implementation is required to minimise discontent towards conflict incidents and reduce retaliation towards wildlife. Innovative mitigation strategies drawing upon various disciplines including animal behaviour, economics, agricultural development, and political sciences and engaging with diverse stakeholders will also help tackle the critical conservation issue of human-wildlife conflict.

Conservation Interventions



Fig 2: Cases of crop damage or property damage are commonly caused by elephants (pictured above), which are themselves often retaliated against through poisoning or electrocution (pictured below). Conservation interventions which engage with the people affected by conflict are crucial in fostering tolerance towards wildlife. Images by Anubhav Vanamamalai.

Human-Wildlife Conflict in Karnataka

Karnataka

Formed in 1956, the state of Karnataka is one of the largest state economies and the eighth-most populous state in the country. The state of Karnataka is the point of confluence for the ecologically important regions of the Western Ghats and the Eastern Ghats. The state has approximately a fifth of its total geographical area under forest cover and an extensive protected area network comprising five National Parks, 23 Wildlife Sanctuaries and one Conservation Reserve; which include five Tiger reserves²⁵. The forests of Karnataka, contiguous with those of neighbouring states of Tamil Nadu and Kerala host globally important and stable populations of tigers and elephants²⁶.

The increasing commissioning of dams, sanctioning of linear projects through protected areas, and afforestation in the form of monoculture plantations, have led to a rise in the loss of forests and shrinking of the state's wild spaces. This often brings wide-ranging species like the elephant and tiger into conflict with humans. The state of Karnataka stands out in terms of the number of wildlife-related incidents reported and compensation payments made among all Indian states. In the 2012-13 period, close to 50% of the wildlife-related losses in the country were reported from this state¹⁰. With a burgeoning economy and population, the state of Karnataka is striving to balance human development goals with wildlife conservation efforts.

Overall, although Karnataka has recorded some of the highest compensation (ex-gratia) payments for human-wildlife conflict incidents, it lacks comprehensive legislation that encompasses within itself all the aspects pertaining to the payment of compensation for human-wildlife conflicts. The current Karnataka wildlife conflict policy is ad-hoc and has thus far been in operation through the promulgation of various Government Orders by the Karnataka Government. Consequently, multiple government orders spanning decades need to be referred to in order to get a complete understanding of Karnataka's compensation policy. As the information on Karnataka's Compensation Policy is currently not consolidated in a single document it is inaccessible to the people most affected by the human-wildlife conflict in the state.

Human-Wildlife Conflict in Karnataka

The amount of compensation and the designated officers with the powers to carry out the survey of damages have been altered multiple times through subsequent Government Orders. The Government Orders do not have the same force of standing as laws, and are relatively more amenable to changes depending upon the whims of changing governments in the state.

The policies and compensations are provided in a series of Government Orders, including Government Order No. APG 143 FWL 2010 dated 30-04-201127 and Government Order No. APG 130 FWL 2016 dated 19-09-201628. The current system is, therefore, ad hoc and ambiguous.

In the current ad hoc system of compensation in Karnataka, there are two fundamental problems:

1. Lack of certainty – of process, entitlements and the authorities to approach.
2. Excessive discretion in the hands of the assessing officers.

Therefore, one of the key recommendations of this report is that a comprehensive law be enacted by the Karnataka legislature addressing the issue of compensation or ex-gratia payments to victims of human-wildlife conflict. The main aim of this compensation law is to address these two problems – removal of discretion and ensuring a streamlined, unambiguous process to claim the compensation that persons affected by wildlife conflicts are entitled to.

Human-Wildlife Conflict in Karnataka

Other Compensation Laws in India

In order to recommend a suitable legal framework for the proposed Karnataka Human-Wildlife Conflict Compensation Law, it would be apposite at this juncture to study the existing comparable compensation schemes in India and their suitability for adoption for the payment of compensation in cases of human-wildlife conflicts. In this regard, the two most important compensation laws in India that this study considers are the Workmen's Compensation Act, 1923 and the Motor Vehicles Accidents Act, 1988.

The Workmen's Compensation Act provides for the payment of compensation to workers and their dependents in cases of injury, disability, or death arising out of and in the course of employment. Section 4 of the Workmen's Compensation Act prescribes the amount of compensation to be paid to workers on the basis of the prescribed percentage of their monthly earnings limited by an upper limit. For instance, workers who died due to an accident at the workplace are eligible to claim 50% of their monthly salaries multiplied by the prescribed factor or amount of one lakh fifty thousand rupees, whichever is higher (Section 4(1)(a), Workmen's Compensation Act, 1923). Similarly, for permanent disablement, the criteria prescribed by the Act is 60% of monthly wages multiplied by the prescribed factor or one lakh twenty thousand, whichever is higher and so on. In case of any dispute, the State is to appoint a Commissioner who will decide the matter. The Commissioner's authority precludes the authority of Civil Courts from dealing with the matters under his domain. Further, the Act also explicitly states the conditions where the workman will lose his entitlement to compensation in cases such as intoxication, willful disobedience of orders, et al (Section 3(1)(a), Workmen's Compensation Act, 1923).

In the case of the Motor Vehicles Act, 1988, the Act gives State Governments the power to set up Motor Vehicles Accident Claims Tribunals under Section 165 of the Act for the purpose of adjudicating upon compensation claims in case of motor vehicle accidents resulting in death, bodily injury and property damage. The Section also prescribes the criteria to be fulfilled to become a member of the Tribunal. Section 168 of the Act sets out the procedure for awarding the claim, which includes hearing the parties, conducting an inquiry into the claim, and the awarding of compensation to the victims. Schedule II of the Act prescribes a set formula based on multiplier factors to calculate the amount of compensation to be paid. It considers factors such as income, annual income, disability, pain and suffering, medical expenses, type of injury et al to determine the compensation amount.

Human-Wildlife Conflict in Karnataka

While different aspects of both of these laws could ably guide the makers of the law in formulating an effective and comprehensive Human-Wildlife Conflict Compensation Law, neither in its totality would be the right choice of compensation models considering the socio-economic conditions and unique circumstances of persons affected by human-wildlife conflict.

For instance, while the idea of appointing a Commissioner for dispute resolution in accordance with the Workmen's Compensation Act could be incorporated in the proposed law, the system of having Tribunals to decide compensation as has been done in the Motor Vehicles Act, would not be appropriate. This is because the aim of the law must be to lessen the transaction costs of procurement of compensation for the victims. Multiple trips to depose in front of Tribunals that will be located away from the areas where these human-wildlife conflicts occur would be barriers to access and would add additional transactions such as time, wages and money lost due to the travel involved. Therefore, the current system of Forest Officers themselves visiting the claimants should continue, with necessary procedural and substantive changes.

Human-Wildlife Conflict in Karnataka

Current Compensation Claims Processing

After a human-wildlife conflict incident has occurred and the Forest Department (or Revenue Department, in certain situations) is informed of it (in writing), an officer of the Forest Department (generally of the grade of local Deputy Range Forest Officer or lower) is dispatched to the spot to survey and estimate the damage that has occurred due to the conflict. As the types of damages are varied, the method of estimation also varies accordingly.

In the case of death of a human being, a postmortem is necessary to ascertain that the death was caused due to a wildlife incident. In the case of death and injury of livestock, it is necessary for the affected persons to show the carcasses of dead animals and obtain a veterinary certificate. In the case of crop damage due to wildlife, the standard procedure for the Officer to estimate the damage is through an eyeball estimate.

After the assessment of damage through the above methods, the Deputy Range Forest Officer (DRFO) is responsible for the creation of an inspection report including details of the incident and proposed compensation.

This form is then submitted to the Range Forest Officer (RFO), who after verification, forwards the form to the Assistant Conservator of Forests (ACF). This is then submitted, with recommendations, to the Deputy Conservator of Forests (DCF) or the Conservator of Forests (CF) for final approval and sanctioning of compensation or ex-gratia payment. If the post of the DCF is not filled, it is sanctioned by the Conservator of Forests (CF). It is to be noted that the general norm is to forward the forms only in bulk, that is individual claims are not processed until a threshold of a certain number of claims is reached.

Human-Wildlife Conflict in Karnataka

Critique of Karnataka's Compensation Policy

The current policy as it stands, provides compensation for five kinds of damages namely, the death of, or injury to humans, crop damage, livestock injury or death and property damage. However, the current compensation policy for payments to those affected by human-wildlife conflicts is riddled with ad-hocism, ambiguities, gaps in processing and inefficiencies. In order to create a law that addresses these issues, it is essential to first understand where the current compensation policy is lacking and how it may be improved. In order to do this effectively, it is important to understand the framework and functioning of the current system.

The following section of this report will contain a discussion of the consequences of having the current ad-hoc system of compensation for human-wildlife conflicts in the State. While the first part of each aspect will discuss the issues stemming from the lack of a concrete law, the second part will contain recommendations on how the situation may be improved through the creation of a separate comprehensive human-wildlife compensation law.

Policy Recommendations for Karnataka

1. Definitions

The current Government Orders merely state that the State will provide ex-gratia payment or compensation for conflicts arising from human-wildlife conflicts. However, there is no official definition of the terms 'wildlife' or 'wild animal' in the Policy. While the Karnataka Forest Department website (aranya.gov.in) mentions that "wild animals" refers to all animals in accordance with the definition provided in Section 2 (36) of the Wildlife Protection Act, 1972, there is a need to ensure that this is reflected in the official policy itself, to remove the possibility of arbitrary changes to this definition, and to provide clarity for all concerned.

According to the definition under the Wildlife Protection Act, 1972, "wild animal" refers to any animal specified under Schedules I to IV and found wild in nature. However, in the absence of a firm link between the policy and law, the current situation often leads to officers on the ground having excessive discretion to interpret the policy as they deem fit.

Recommendation

There is a need to have a clear definition of the term "wildlife" officially included in the government policy and a clear iteration of the fact that the term "wild animals" refers to those as defined under the Wildlife Protection Act, 1972.

Additionally, it is recommended that the proposed Karnataka Human-Wildlife Compensation Law have an exhaustive list of definitions in order to remove all inconsistencies and opportunities for misinterpretation, and include species which may spend time in and around human habitation, and are not 'wild' in the strictest sense of the word.

Policy Recommendations for Karnataka

2. Officers Responsible for Compensation Disbursal

In order to facilitate effective administration of forests in Karnataka, the forests are divided into multiple sectors. As per the Karnataka Forest Code, 1976, each of these sectors, namely Sections, Beats, Ranges, Divisions, and Circles are under the administrative control of different forest officials. As per Chapter I (A)(6) of this Act, the Conservators are the administrative heads of the Circles (of which there are a total of 7 in Karnataka), Deputy Conservators of Forests are in control of Forest Divisions, Ranges are under the control of Range Forest Officers and Beats are policed by Forest Guards.

The current Karnataka Compensation Policy directs that these Forest Officers are to be in charge of various aspects of compensation disbursal such as inspection, survey, processing and approval of compensation payments. As per the latest Government Orders, multiple officers (such as the Deputy Conservator of Forest and Conservator of Forest) have been given the power to assess claims and sanction compensation. For instance, as per the 2011 (a) Government Order, while the Assistant Conservator of Forests has been given the power to assess and sanction compensation up to Rupees one lakh (further limited by upper limits) for crop damage by wild animals, three different Officers, namely the Deputy Conservator of Forests, Conservator of Forests and Chief Conservator of Forests have been given the power to assess and grant compensation that is over one lakh. Similarly, when the upper limit of compensation per hectare is Rupees fifty thousand, the power to grant compensation has been granted to the Conservator of Forests and the Chief Conservator of Forests.

This excessive delegation and multiple authorities within the scheme of distribution are extremely unclear and ambiguous. It increases bureaucratic hurdles and transaction costs for the claimants in addition to causing confusion. Further, even though the Government Orders prescribe different officers, the situation on the ground is that Range Forest Officers are carrying out a majority of these functions.

Policy Recommendations for Karnataka

Recommendation

It is recommended that the Range Forest Officers be given powers of survey, investigation and forwarding of claims in the proposed law. Additionally, in cases where fraudulent claims are attempted, it is recommended that the Range Forest Officer be given the power to reject such claims. However, it is necessary that any rejection must be based on reasoned causes which will be clearly stated and communicated to the claimant in a written form.

Such an Order of Rejection must necessarily be based on predefined grounds such as:

1. Lack of evidence of wildlife injury
2. Fraudulent claim
3. Conflict incidents occurring within designated protected areas.

Any procedural lapse will result in the claim being returned to the claimant with a request to resubmit the claim with all relevant documentation. It should also be imperative for the Range Forest Officer to provide the claimant with a reasoned Order of Rejection. The proposed law must provide an avenue for an aggrieved claimant to contest such an Order of Rejection. The current system of multiple officers having differing powers depending on pecuniary terms is highly confusing and must be amended to ensure speedy investigation, processing and payment of schemes.

It is suggested that in cases of Livestock Injury or Death, Crop Damage, and Property Damage, there be a two-tier system of compensation disbursement, with the Range Forest Officer being the reporting officer and the Assistant Conservator of Forests or Deputy Conservator of Forests being the disbursing officer.

In cases of human death and injury, a three-tier system is suggested, involving the Range Forest Officer, Assistant Conservator of Forests or Deputy Conservator of Forests and the Conservator of Forests.

Policy Recommendations for Karnataka

Table 1: Suggested Hierarchy of Officers for Claims Reporting and Compensation Disbursal

Sr. No.	Type of HWC Incident	Suggested Officer Hierarchy
01.	Crop Damage, Property Damage, Livestock Injury and Death	1. Range Forest Officer 2. Assistant Conservator of Forests or Deputy Conservator of Forests
02.	Human Injury and Death	1. Range Forest Officer 2. Assistant Conservator of Forests or Deputy Conservator of Forests 3. Conservator of Forests

Policy Recommendations for Karnataka

3. Discretion and Standardization of Criteria

The current policy awards compensation on five kinds of damage suffered by victims of human-wildlife conflict:

1. Compensation for injuries of a human
2. Compensation for death of a human
3. Compensation for crop damage
4. Compensation for livestock injury or death
5. Compensation for property damage (apart from crops and livestock).

For each of the above categories, the Karnataka Policy recommends various compensation amounts. However, there is no standardization of the criteria to be assessed for the calculation of compensation and the weight to be given to each component. The current policy does not lay down the criteria upon which the compensation amount has been arrived at for any of the damages that result from human-wildlife conflicts and this needs to be addressed in the new law.

Recommendation

In the proposed Human-Wildlife Compensation Law, it is recommended that separate objective criteria be applied for the calculation of each type of compensation category. Such criteria will be laid down in the law for all categories, as also the weight to be given to each for the calculation of the amount of compensation.

For instance, in cases of crop damage, the current method of calculation through an eyeball estimate is unscientific and inaccurate. Instead, better assessment methods for the calculation of damage need to be adopted. For example, a better assessment method for calculating crop damage compensation would be to take into account the value of the crops, and the acreage of the field damaged as determined through measurements taken by a Global Positioning System (GPS) unit.

Policy Recommendations for Karnataka

Additionally, instead of a blanket compensation of an amount per cow/ox/buffalo or per goat/sheep, further differentiation in terms of breed, species, milk yielding or non-milk yielding nature and age of the animal needs to be considered and appropriate weight must be placed on each criterion to arrive at a more scientific amount of compensation.

Further, the Government needs to consider changing the criteria to a percentage of the prevailing market value of the damaged property to arrive at fair compensation payments.

Additionally, the policy provides a range within which compensation may be paid. For instance, the 2014 Policy (since amended) provided for the payment of a minimum of Rs 5,500/- and a maximum of Rs 6,000/- as ex-gratia for loss of domestic animals. However, as there are no criteria stated upon which the amount of payment is to be based, this effectively leaves it to the discretion of the official in charge of the case to decide. This kind of arbitrary and discretionary payment of compensation amounts must not be allowed.

Additionally, the types of crops being grown in the state continue to change throughout the years. In the current Policy, there are no criteria laid down for the constitution of an authority to consider and amend the same periodically. The crop list as provided is not exhaustive and thus leads to the exclusion of payment of damages to persons who have grown crops outside the list prescribed by the government. Further, it is suggested that trees that are damaged in human-wildlife conflicts are compensated separately, based on factors such as age, yield per year, etc.

It is further recommended that in the proposed human-wildlife compensation law, there must be no discretion in terms of the quantum of compensation to be paid by the officers in charge of disbursement of funds. The current practice of providing a range of compensatory amounts needs to be eliminated and a single calculable compensation amount for each type of damage must be clearly specified.

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Table 2: Suggested Criteria for Calculation of Compensation

Sr. No.	Type of HWC Incident	Suggested Criteria for Compensation
01.	Crop Damage	<ol style="list-style-type: none"> 1. Crop area, biomass, yield 2. Based on three year State average market price of crop
02.	Property Damage	<ol style="list-style-type: none"> 1. Cost of replacement or repair with a set upper limit (to be decided)
03.	Livestock Injury	<ol style="list-style-type: none"> 1. Extent and nature of injury 2. Cost of medical assistance with a set upper limit (to be decided)
04.	Livestock Death	<ol style="list-style-type: none"> 1. Breed: Native/Non-native breed, Hybrid 2. Milk giving/non-milk giving nature 3. Age: Adult or juvenile 4. Based on three year State average market price of the animal
05.	Human Injury <ol style="list-style-type: none"> 1. Initial assessment and treatment of injury 2. Secondary claim for serious injury/disability 	<ol style="list-style-type: none"> 1. Cost of initial medical expenses, including medication to be borne by a Government hospital. 2. Cost of private medical assistance with a set upper limit (to be decided) 3. Certification of the extent of injury by the District Medical Officer for secondary claims 4. Loss of potential earnings 5. Trauma compensation
06.	Human Death	<ol style="list-style-type: none"> 1. Funeral expenses with a set upper limit (to be decided) 2. Flat compensation

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4. Requirements for Proof of Damages and Claims

The current system of payment of compensation lacks a comprehensive iteration of the types of evidence that needs to be submitted by a victim of human-wildlife conflicts. Unofficially, claimants are required to submit various proofs of damage such as death certificates in case of human death due to wildlife, photographs of carcasses of livestock and veterinary certificates in case of livestock injury or death, photographs of the area of crop damages etc, to forest officials.

It is necessary to note that these requirements are not standard across Karnataka, thus leading to further confusion. Further, as these requirements are not stated officially anywhere, a lot of time, money, and effort is spent by the claimants to procure the required documents for submission.

Currently, claims are often rejected on grounds of the quality and contents of documentation, paperwork, and photographs. This kind of ambiguity leads to a lack of efficiency and transparency in the system. Additionally, it increases the monetary and mental costs of raising a claim for wildlife compensation, and thus indirectly denies victims of wildlife conflict their right to fair and timely compensation.

Recommendation

It is absolutely essential that the proposed state law on human-wildlife conflicts compensation has evidentiary requirements clearly and unambiguously stated. A uniform law across the state will also prevent multiple wildlife ranges from having their own unique requirements for processing claims, thereby streamlining the evidence collection process and improving overall efficiency and time taken for payment of compensation claims. It is also essential that the photographic requirements be made digital so as to eliminate the possibility of rejection of claims based on criteria such as number, size, print quality etc.

Additionally, it is recommended that where there is ambiguity with regard to whether livestock died due to natural causes or a wildlife incident, that a post mortem be conducted at the expense of the Government to ascertain the cause of death. The process of the disposal of the carcass must also be specified.

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Table 3: Recommended Documentation Required to File a Compensation Claim

Sr. No.	Type of HWC Incident	Recommended Documentation
01.	All HWC Incidents	<ol style="list-style-type: none"> 1. Aadhaar Number 2. Bank Passbook 3. Photographs, the format of which can either be in print or digital, of: <ol style="list-style-type: none"> a. Comprehensive coverage of area of damage or loss b. Excreta or footprint/signs of animal (only if present) c. Photographs of claimant (present at the site of HWC incident)
02.	Crop Damage	<ol style="list-style-type: none"> 1. Proof of land ownership or lease (RTC, notarized certificate) 2. Crop Certification (RTC)
03.	Property Damage	<ol style="list-style-type: none"> 1. Proof of ownership or lease (RTC, notarized certificate, land tenure certificate) 2. Bills, invoices, or estimates of repair or replacement (where available) with an affidavit
04.	Livestock Injury or Death	<ol style="list-style-type: none"> 1. All cases: Veterinary Certificate 2. In cases of death: <ol style="list-style-type: none"> a. Post Mortem Report b. Photographs of disposal of livestock through burial or cremation
05.	Human Injury or Death	<ol style="list-style-type: none"> 1. Record of extent of injuries sustained from hospital doctor, and District Medical Officer (in cases of grievous injury or permanent disability) 2. Photographs of injury or remains 3. Death Certificate

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5. Claims Form Format

Anecdotal evidence shows that the biggest bottleneck, causing the highest amount of delay in payment of compensation, is the processing of claims forms. As there is no single law that mandates a standard form, most wildlife ranges in Karnataka have their own forms where the information required to be filled by the claimants varies widely.

For instance, whereas some forms require only thumb impressions, some require signatures and thumb impressions, while some need to be filled in the presence of forest officers, others do not. This kind of ambiguity cannot be allowed to exist in a system of redressal such as the payment of compensation. Not only does this lead to confusion among the claimants themselves, but it also leads to an increase in rejection of claims forms due to non-fulfilment of arbitrary procedural requirements.

Recommendation

It is recommended that the proposed human-wildlife conflict compensation law provide a separate annexure containing the official claims form that must be used across Karnataka. It is also recommended that arbitrary requirements be removed, and essential requirements be mentioned clearly and concisely within the proposed law itself.

It is recommended that a system of digital, mobile, and postal updates be created for tracking the progress of the claims which provide the claimant information on location, type and extent of damage, date of filing and compensation to be expected, and date and medium of receiving compensation.

It is recommended that the proposed law on wildlife compensation make it mandatory to share micro and macro-level data openly so as to enable more scientific studies and research on the same.

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6. Time Frames and Grievance Redressal

The current Karnataka Policy does not lay down time limits for the payment of compensation to those affected by human-wildlife conflict incidents. Considering the socio-economic conditions of those most affected by human-wildlife conflict, the current delays deny justice to the victims in a very real sense. The delay of this compensation often leads the families affected by wildlife conflict into poverty traps as the destruction of property by wildlife often carries with it significant financial costs. Additionally, it is also more likely to lead to violence against the wildlife as it has been shown that 'maintaining a tolerance for losses is critical for long-term species survival and conservation efforts'.

Further, evidence on the ground shows that officers are currently delaying the processing of claims until a certain number of claims are amassed. This is against the avowed purpose of paying timely compensation to the victims of human-wildlife conflict and must be prohibited completely. It is also important that persons affected by human-wildlife conflict file their compensation claims within a limited time frame to enable easy verification of claims and examination of evidence as soon as possible.

Recommendation

In order to ensure timely payment of compensation, the proposed human-wildlife compensation law needs to mandate time limits for both - the filing of the compensation claim and the payment of compensation. It is essential that the claimants be given a choice in the mode of payments including instant electronic transfer into bank accounts.

The proposed law must contain a step by step iteration of all the processes involved from beginning to end of the compensation claim process. It is especially necessary that the law specifies the responsibilities of the forest officers, as well as timelines for every task that needs to be completed. This will ensure transparency and accountability on the part of the Forest Officials. This information should be made public, such that claimants are aware of the causes of delay and may take steps to address the same if necessary. As human death and injury by wildlife might lead to retaliation by affected persons, it is essential that the compensation be disbursed immediately.

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Additionally, it is recommended that the state establish a system by which the victim's family is able to effectively register their claim without unnecessary hindrances such as a written petition to a Range Officer. This could be through a state-sponsored helpline, where the option for the type of damage can be chosen and the Range Forest Officer concerned is immediately alerted to any instance of human-wildlife conflict. A possible way to achieve the above, with necessary amendments, through a pre-existing legislative framework would be to mandate that the payment of compensation for human-wildlife conflict be provided through The Sakala Services Act, 2011 (The Karnataka Guarantee of Services to Citizens Act). Under the Act, a provision for the payment of compensation for human-wildlife conflicts already exists. The implementational aspects of the Act are contained in its Schedule.

However, certain lacunae exist in the current system, which need to be addressed to make it a truly effective compensation disbursement system for persons affected by human wildlife conflicts, which include:

1. Changes to the compensation payment timeline as suggested in this Report.
2. The addition of compensation for : Livestock injury, human injury that is not permanent disability and property damage.
3. The addition of a standard template of the compensation form to be filled by the claimants to reduce ambiguity.

These changes may be brought about in Section 4 of the Act, which provides that changes regarding services, designated officers, competent officers, appellate authority and stipulated time limits may be made by the government through a notification.

Therefore, it is suggested that the Schedule to the Act be amended as per the suggestions provided in this Report. Additionally, the Act also provides a pre-existing grievance redressal mechanism under Section 13(1), whereby the claimant is given the right to appeal to the Competent Authority as defined under the Act, within 30 days of either rejection of the claim or non provision of services by the Designated Officer (The Range Officer). A further right to appeal lies with the claimant if aggrieved by the decision of the Competent Authority, as defined under the Act.

Another route to enable effective grievance redressal is to set up a separate system for the same, through the Evaluation wing of the Karnataka Forest Department. Table 6 designates authorities responsible for the processing and payment of compensation for human-wildlife conflict. Further, it also designates officers for grievance redressal in cases of non-compliance and non-payment of compensation.

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Table 4: Recommended Timeline for Compensation Claim Filing and Payment

Sr. No.	Type of HWC Incident	Claim Filing Timeline	Compensation Payment Timeline
01.	Crop Damage	7 Days	Within 45 Days of acceptance of claim
02.	Property Damage	7 Days	Within 45 Days of acceptance of claim
03.	Livestock Injury and Death	3 Days	Within 14 Days of acceptance of claim
04.	Human Injury	7 Days	<ol style="list-style-type: none"> 1. Initial Assessment: Within 14 Days of acceptance of a claim 2. Secondary claim: Within 30 days of acceptance of a claim
05.	Human Death	7 Days	<ol style="list-style-type: none"> 1. 50% of compensation on verification of claim, along with funeral expenses 2. 50% within 7 days of acceptance of claim

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Table 5: The SAKALA Act Framework with Recommended Changes

Sr. No.	List of Services	Designated Officer		Competent Officer		Appellate Authority	
		Rank	Stipulated Time	Rank	Stipulated Time	Rank	Stipulated Time
01. A	Ex-gratia to be sanctioned to the concerned for crop damages caused by wild animals Service: Investigation and forwarding of claim.	RFO	30 working days. Suggested ammendment: 2 working days post receipt of HWC information.	ACF/ DCF/CF	30 working days.	APCCF/ PCCF (Wildlife)	30 working days.
01. B	Ex-gratia to be paid to the concerned for crop damages caused by wild animals.	ACF/ DCF/CF	30 working days.	APCCF/ PCCF (Wildlife)	30 working days.		
02. A	Ex-gratia to be sanctioned in case of livestock killed by wild animals.	RFO	15 working days. Suggested ammendment: 2 working days post receipt of HWC information.	ACF/ DCF/CF/ CCF	25 working days.		
02. B	Ex-gratia to be paid to the concerned for livestock killed by wild animals.	ACF/ DCF/CF/ CCF	25 working days.	APCCF/ PCCF (Wildlife)	30 working days.		

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Sr. No.	List of Services	Designated Officer		Competant Officer		Appelate Authority	
		Rank	Stipulated Time	Rank	Stipulated Time	Rank	Stipulated Time
03. A	Ex-gratia to be sanctioned in case of human death/ permanent disability caused by wild animals. Service: Investigation and forwarding of claim.	RFO	15 working days. Suggested ammendment: 2 working days post receipt of HWC information.	ACF/ DCF/CF/ CCF	20 working days.	APCCF/ PCCF (Wildlife)	30 working days.
03. B	Ex-gratia to be paid to the concerned for human death/ permanent disability caused by wild animals.	ACF/ DCF/CF/ CCF	Suggested ammendment: Death: 50% of compensation and funeral expenses on verification of incident. 50% within 7 days of acceptance of claim. Injury: Initial assessment within 14 days of acceptance of claim. Secondary claim within 30 days of acceptance of claim.	APCCF/ PCCF (Wildlife)	30 working days.		
04.	Reimbursement of medical expenses (if treated in Govt. hospitals/medical institutions or other hospitals recognised by the Govt), or up to a set upper limit in private hospitals.	Group-A/ IFS Of- ficer/con- cerned DDO	30 working days. Suggested ammendment: 2 working days post receipt of HWC information.	CF/CCF/ APCCF/ PCCF (HOFF)	15 working days.	DCF/CF/ CCF/ APCCF/ PCCF (HOFF)/ Principal Secretary (FEE)	30 working days.

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Table 6: Suggested Alternative Grievance Redressal System

Sr. No.	Service Provided	Designated Authority	Grievance Redressal Officer	Time to Redress Grievance
01.	Crop Damage Compensation	<ol style="list-style-type: none"> 1. Range Forest Officer 2. Assistant Conservator of Forests 3. Deputy Conservator of Forests 	Conservator of Forests	30 working days from the filing of a grievance
02.	Property Damage Compensation	<ol style="list-style-type: none"> 1. Range Forest Officer 2. Assistant Conservator of Forests 3. Deputy Conservator of Forests 	Conservator of Forests	30 working days from the filing of a grievance
03.	Livestock Injury and Death Compensation	<ol style="list-style-type: none"> 1. Range Forest Officer 2. Assistant Conservator of Forests 3. Deputy Conservator of Forests 	Conservator of Forests	30 working days from the filing of a grievance
04.	Human Injury and Death Compensation	<ol style="list-style-type: none"> 1. Range Forest Officer 2. Deputy Conservator of Forests 3. Conservator of Forests 	Principal Chief Conservator of Forests	30 working days from the filing of a grievance

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7. Oversight

Currently, the Karnataka Government disburses funds for human-wildlife conflict compensation from different sources such as the Integrated Development of Wildlife Habitats (IDWHS), which is a central government scheme, Project Tiger and Project Elephant. The State also uses its own funds for ex-gratia payments. States request funds from the central government and allocate from their own budgets on an annual basis.

Recommendation

In order to ensure that funding for ex-gratia compensation for incidents of human-wildlife conflict is adequate and proportioned properly between the different national parks and reserves, we recommend the establishment of an Oversight Committee.

This committee will be responsible for auditing expenditure on compensation payments, managing the allocation of budgets, and provide recommendations for requisite funding in the upcoming financial year budgets and reports.

We suggest that this committee comprises of senior staff from the State Forest Department, IAS officers, and local elected representatives, who will collectively recommend the requisite budget related to human-wildlife conflict compensation payments on an annual basis.



Summary

India's wildlife lives within a network of protected areas, as well as alongside people in cultivated and human-dominated landscapes. Interactions between humans and wildlife are an inevitable consequence of the sharpening of the divide between natural habitats such as forests and grasslands, and agricultural or plantation forestry lands. Interactions with animals will continue to occur, with many leading to the loss of crops, property or livestock.

An established mandate by the Government of India is to assist those facing losses due to human-wildlife conflict incidents through financial assistance, carried out through compensation or ex-gratia payments. However, the current policy and procedures on compensation disbursement for such losses from conflict incidents, as elaborated upon above, are riddled with gaps and inconsistencies. This often results in a loss of livelihood, financial instability, and reduced tolerance towards wildlife, the reserves and government staff.

This report highlights the most pressing issues with the current ad hoc policy, and provides clear and concise recommendations on the need for the creation of a legislative framework that will address the lacunae in the current policy. The recommendations for the proposed Karnataka Human-Wildlife Conflict Compensation Law has been designed to allow for easy implementation, while greatly reducing inconsistencies and arbitrariness in payment criteria, removing ad-hoc discretion, and strengthening the quality of services provided to the citizens of the State.

It is therefore imperative that the Karnataka Human-Wildlife Compensation Law be enacted post haste, in order to simplify and enhance the provisions regarding compensation payments in incidents of human-wildlife conflict. This proposed law will increase access and transparency of human-wildlife conflict compensation schemes, and help foster tolerance towards wildlife, thus helping maintain and promote coexistence between Karnataka's people and wildlife.



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Densely populated settlements and cultivated fields surround the protected areas of India, home to some of the largest stable populations of endangered megafauna. However, this proximity often results in interactions leading to conflict, with crops, property, livestock and even human lives lost. While ex-gratia compensation payment policies exist to help lessen the burden of such losses, ineffective implementation and the often obdurate schemes cause frustration, often resulting in retaliation against the wildlife.

If India is to balance its economic development with its recovering biodiversity, reforms in the policies and laws dealing with human-wildlife conflict are required. This publication, the result of a collaboration between conservationist scientists and policy experts, delves into the current system of human-wildlife conflict and compensation in the state of Karnataka. Through simple changes and easily implementable recommendations, the report outlines a robust framework for a comprehensive human-wildlife conflict compensation payment.

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