

Man Animal Conflict: An emerging menace in North East India

Himashree Bhattacharyya¹, Ashok Puranik², Rashmi Agarwalla³

^{1,3}Department of Community and Family Medicine, All India Institute of Medical Sciences Guwahati, Silbharal, Changsari, Assam

²Executive Director, All India Institute of Medical Sciences Guwahati, Silbharal, Changsari, Assam

CORRESPONDING AUTHOR

Dr. Himashree Bhattacharyya, Additional Professor, Department of Community and Family Medicine, All India Institute of Medical Sciences Guwahati, Silbharal, Changsari, Assam 781101

Email:

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ABSTRACT

Man animal conflict is emerging as a huge threat with considerable loss of both human and animal lives, loss of property and livelihood affecting mostly the population to come in close proximity to the animal habitats. With the increase in human populations, man is intruding more and more into the forests for expansion of construction and other activities leading to increasing conflicts for territory. Climate change can alter the climates of specific regions causing scarcity of water and biodiversity for animals which can result in animal migration and thereby increasing the chances of conflict. Co-ordinated efforts at global levels with increasing pressure on the government to adopt policies to address this issue is of prudence. Understanding the dynamics of human wild life relationship and identification of the deeper underlying causes of conflict needs to be done in a context specific manner. Development of strategies with long lasting impact is the need of the hour to address this rising menace.

KEYWORDS

Man, Animal, conflict, North East India

INTRODUCTION

With the increasing urbanization, changes in climatic patterns and increasing intrusion of man into the sylvatic cycle, man animal conflict has become a cause of growing concern in the present world. With the increase in human population and movement, there is rise in interaction and increasing competition between man and wild life for resources thereby leading to an increase in man animal conflict. The IUCN Species Survival Commission (SSC) Human-Wildlife Conflict & Coexistence Specialist Group defines human-wildlife conflict as “struggles that emerge when the presence or behaviour of wildlife poses an actual or perceived, direct and recurring threat to human interests or needs, leading to disagreements between groups of people and negative impacts on people and/or wildlife.” (1)

A situation of conflict arises when there are negative consequences like loss of property, life and livelihoods. Retaliatory killing from the humans may eventually drive these species to extinction. These conflicts have far reached effects including effects on sustainable development and businesses. The issue has the potential to affect the global dynamics. However, it has not received the attention and focus on the scale required by the global community. This article throws light on

1. Major causes contributing to man animal conflict and its impact on the biodiversity
2. Current strategies that need to be adopted to curb this emerging threat.

The direct impact of man animal conflict is mostly felt by the wild life and the communities that live in the conflict zones. Not only does it cause loss of human lives and financial losses but also lead to decline and eradication of precious fauna. Another important aspect is that the burden of this loss is not evenly distributed with the maximum brunt being borne by poor underprivileged people living below the poverty line. Human wildlife conflict is having a negative influence on our conservation systems. It is threatening the existence and survival of some of the world's most iconic species, including elephants and tigers. A report was published by World Wildlife Fund titled “A future for All: The need for human wild life co-existence” which highlighted the complexities of this conflict and the need to address the issue of human wild life co-existence(2)

Several events can lead to conflict between humans and wild animals, including expanding human populations, resource competition, agricultural expansion, and climate change.

One of the major causes of man animal conflict is the rapid expansion of human population which has more than tripled over the last 70 years. This has resulted into intrusion of humans into the sylvatic habitat as humans start converting forest land for agriculture and construction activities. This intrusion leads to loss of habitat for animals and increases proximity between man and animal creating an environment for increasing conflicts to maintain the territory. There has been a

drastic rise in world's human population growing from just 2.5 billion people in 1950 to eight billion as of 2022 which is more than triple over the last 70 years.(3)

Conversion of natural habitats of animals into agricultural land causes loss of access to food and water sources for animals and they tend to be fragmented. This forces the animals to feed on human crops and livestock which are easily available now at close proximity to them. Use of poison and traps to kill or injure animals by humans can lead to unscrupulous killing of these animals.

Another major reason is the changing effects of climate. Climate change can alter the climates of specific regions causing scarcity of water and biodiversity for animals. Wild animals may start migrating into different areas in search of food and water which increases the chances of their crossing paths with humans. It has been observed that more than 80% of case studies into human wild life conflict are due to changes in climatic conditions in terms of temperature and rain fall. Thus, scarcity of life sustaining resources in an area intensifies the competition between humans and wild life.(4)

As has already being mentioned the major brunt of living with wild life has to be borne by communities who are marginalized and have less access to economic opportunities and modern facilities. The irony of the fact is that a section of the community benefits from healthy wildlife populations and ecosystems ignorant of the effects it has on the marginalized communities living in close proximity to wildlife. This issue therefore has to be looked as a humanitarian issue affecting a section of people with lower socio-economic status like the farmers, herders and fishers. Sometimes there are collateral damages whereby animals that aren't involved in the conflict directly can get killed by human actions like setting traps or poisoning wildlife. This can often lead to the persecution of the specific animal involved in the conflict. Due to the damage inflicted, humans tend to develop negative perceptions of certain animals, and these perceptions can persist for generations. This can hamper conservation efforts of our vital ecosystems as humans fail to perceive the role of wildlife in maintaining the ecosystems.

Though the immediate effects of this conflict are borne by the communities in close proximity, however we cannot undermine the fact that in the long run it could impact globally through the decrease of agricultural productivity, disruption of global supply chain leading to food insecurity, damage to infrastructure and injuries or death in both humans and wild life. Another major risk is the chances of diseases transmission. As man intrudes more into the wild life cycle, most of the diseases which have been indigenously circulating among wild life may jump into the human population causing outbreaks of diseases which may increase to epidemic and pandemic proportions. Some of the classic examples are the HIV/AIDS, Monkey pox, COVID 19, Nipah etc.(5)

Assam is a land of forests with a diverse array of flora and fauna. According to forest survey of India, Assam lost 65 per cent of its lowland semi-evergreen forests since 1972. It has been reported that between the years 1991 to 1999, the North eastern states together lost 1802 sq kms of elephant range habitat. A total of 245 humans and 146 elephants were killed between 2001 and 2014 in man-

animal conflict on border between Assam and Bhutan as per the data of the Assam Forest department. The Bogapani elephant corridor in Digboi, which is known as the longest corridor in Asia, and the Golai elephant corridor has also been affected due to the human encroachment. Leopard attacks has also become very common especially in tea garden workers. Also, as the cities expand and encroach into the neighbouring forest fringes, leopards can also be caught venturing into these newly located human settlements. With the increase in the numbers of rhino, there is also a rise in attacks at safari vehicles carrying tourists to the National parks. Tigers are also seen venturing in human settlements located in the vicinity of the National parks often attacking domestic animals.(6,7)

Current strategies to address wild life conflict:

It is of prudent importance to understand that wildlife is the essence of healthy ecosystems. It is an important component to achieve the Vision for Biodiversity 2050 by United Nations in which 'humanity lives in harmony with nature and in which wildlife and other living species are protected'.

Though efforts are been directed to this issue but it is mostly piecemeal in nature with lack of concerted and coordinated efforts across various sectors. The first and foremost thing required is a situational analysis of the problem which may differ across the different geographical regions. Understanding the dynamics of human wild life relationship and identification of the deeper underlying causes of conflict needs to be done in a context specific manner. It has to be understood that the causes behind these conflicts are complex and has unique ecological, cultural, social, historical, physical, economic and political characteristics. Communities affected need to be actively involved in the process to understand their views and perceptions.

Human wildlife conflict needs actions at the policy and governance level. Countries need to include Human wild life conflict in their policies and strategies for effective mobilisation of funds to address this issue. Involvement of various sectors and stakeholders like Forestry and wild life conservation, agriculture, animal husbandry, conservation specialists, community leaders, researchers, businesses etc. for orientation to the issue and effective planning is the need of the hour. Inputs from experts in field of ecology, social psychology, economics, environmental law are vital to understand and design effective strategies to reverse the conflict to a more benign existence.

Installation of effective surveillance and early warning systems, training of local people, use of deterrents and repellents like beehives or lights, compensation for damages incurred, providing risk reducing alternatives are some of the strategies that could be taken into account after doing a ground analysis depending on the communities and the type of animals involved including the geographic terrain. It is of utmost importance that these strategies need to be implemented through a collaborative process among the various stakeholders involved and taking into account the good principles of community led conservation. It is important to understand that there can be no 'quick fixes' to combat human-wildlife conflicts but to delve into the deeper

issues behind these mechanisms. Most of the strategies implemented do not consider the wider social and local contexts which can lead to unintended consequences. Therefore, considerable time needs to be devoted for understanding the situation and developing a strategy which can have a long-lasting impact.(4,8)

In NE India, special provisions need to be created for preservation of elephant corridors. If required legal provisions need to be made so that there is no encroachment of land for cultivation or plantation in the route of elephant corridors. It is recommended that provisions for “protected elephant movement corridors” be amended to the Indian Wildlife Protection Act. Expansion of protected areas for elephant with creation of special protection zones can help prevent intrusion of humans into these areas. Acquisition of protected land by the Government by providing suitable compensation to the owners may be required to conserve the corridors. Though poaching activities have come down in NE region to a great extent, but it needs constant surveillance with better trained staff and use of modern technologies for monitoring. New encroachments should be discouraged or banned, especially in the reserve forestlands. Encroachment should be strictly monitored and planned eviction may be immediately done in protected areas or animal corridors. It is important that commercial forestry/logging in the remaining natural patches of forest should be discouraged. Involvement of conservation specialists and NGOs working on wildlife for educating the local people on animal behaviour and wild life movement and preservation is of utmost importance. At the same time, timely and adequate compensation of the families affected due to man animal conflicts and strategies for reducing the dependency of villagers on forest lands may be designed.(9)

Human-wildlife conflict management strategies can create resolve several issues and create opportunities not only for biodiversity and impacted communities, but for society, sustainable development, production, and the global economy at large.

DECLARATION OF GENERATIVE AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors haven't used any generative AI/AI assisted technologies in the writing process.

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