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# Impact Of Armed Insurgency On Man-Wildlife Conflicts In The Valley Of Kashmir, J & K, India

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Abstract: Human-animal conflicts have assumed alarming proportions in the Himalayan valley- Kashmir. Every now and then we receive reports of attacks by wild animals causing death, injuries to human beings and livestock. Over the last three years more than 50 people and some 500 animals have died in these conflicts. But, in that period, more than 200 wild animals were also rescued and released into the wild by staff of the wildlife department. Animals are often get killed, captured or are harmed in retaliation and these conflicts are a major threat to the continued survival of many species. This was done despite the fact that killing it carries a prison sentence of 2-6 years and fine. Over the last few years there have been many such incidents where people have tried to capture the animals or kill them. The steadily decreasing forest cover, a result of legal and illegal deforestation and human encroachments into the forest, is a direct cause for increasing encounters between humans and animals. Since the inception of armed insurgency in the conflict zone of Kashmir, the government of India has immensely increased and encouraged the presence of large consignment of armed forces in the dense forests. The natural habitat of the wild animals has got disturbed. With result they stray into human settlements.

Keywords: Human-wild conflict, Armed insurgency, Wildlife habitat

#### I. INTRODUCTION

The wildlife of India is a mix of species of diverse origins. [1] The region's rich and diverse wildlife is preserved in numerous national parks and wildlife sanctuaries across the state. [2] Jammu and Kashmir location is between 32.17" and 36.58" North altitude and East to West, the State lies between 73.26" and 80.30" longitude. [3] The State is bounded by Pakistan, Afghanistan and China from the West to the East. The Jammu and Kashmir (J & K) provides a considerable diversity of habitats for the biodiversity. These range from the inhospitable but beautiful snow capped mountains, permanent glaciers and the cascading lush green alpine meadows studded with lovely but mute wild flowers stretching for miles.

Supporting this is a temperate climate and fresh and clean air. <sup>[4]</sup> The recorded Forest area is 20230 Sq. Kms. which constitutes 19.95 % of geographical area of the State. Forests are largely distributed in Kashmir Valley and Jammu regions. There are five forest types occurring in the State Viz. Subtropical Dry Evergreen, Himalayan Moist Temperate, Himalayan Dry Temperate, Subtropical Pine and Sub-alpine and alpine Forests. <sup>[5]</sup>

#### II. THE VALLEY OF KASHMIR

The Valley of Kashmir which has been described as the 'Paradise on Earth' is full of many hues of wood and game. <sup>[6]</sup>

But has been 'cursed' in the present times. However, it continues to remain the 'biological paradise' [6]. The 50.97% area of Kashmir is under forest cover. [7] (Table 1)

Region		Geographical Area	Population	Density per	Forest Area	% Age of col.4
Region	District	(Sq. Km.)		Sq,Km	(Sq. Km.)	to col.3
a) Kashmir	1. Srinagar	2228	12,02,447	540	380	17.06
	2. Budgam	1371	6,29,309	459	477	34.79
	3.Anantnag	3984	11,72,434	294	2068	51.91
	4.Pulwama	1398	7,52,607	467	810	57.94
	5.Baramulla	4588	11,69,780	255	2690	58.63
	6.Kupwara	2379	6,50,393	273	1703	71.58
	Sub-total Kashmir: -	15948	54,76,970		8128	50.97

Table 1: District wise percentage of forest cover in Kashmir

The area under national parks, sanctuaries and wet lands is given in a tabulated form hereunder [8]:

S. No.	Name of the Protected Area	Area	Wildlife Division
	al Parks & Sanctuaries		
1	Dachigam National Park	171.25 sq.kms	Central
2	City Forest (Salim Ali) National Park	9.00 sq.kms	Central
3	Rajparian (Daksum) Wildlife Sanctuary	20.00 sq.kms	South
4	Overa-Aru Wildlife Sanctuary	511.00 sq.kms	South
5	Hirpora Wildlife Sanctuary	114.50 sq.kms	South
6	Baltal (Thajwas) Wildlife Sanctuary	210.50 sq.kms	Central
7	Gulmarg Wildlife Sanctuary 139.25 sq.kms		North
8	Limber Wildlife Sanctuary	43.75 sq.kms	North
9	Lachipora Wildlife Sanctuary	93.50 sq.kms	North
Conser	vation Reserves		
1	Khiram Conservation Reserve	15.75 sq.kms	South
2	Panyar	10.00 sq.kms	South
3	Khanagund	15.00 sq.kms	South
4	Shikargah	15.50 sq.kms	South
5	Khrew	50.25 sq.kms	South
6	Khonmoh	67.00 sq.kms	Central
7	Brain-Nishat	15.75 sq.kms	Central
8	Sharazbal	2.00 sq.kms	Central
9	Khimber / Dara /Sharazbal	34.00 sq.kms	Central
10	Wangat/Chatergul	12.00 sq.km	Central
11	Ajas	48.00 sq.km	Central
12	Naganari	22.25 sq.km	North
13	Zaloora, Harwan	25.25 sq.km	North
14	Achabal	0.50 sq.km	W.L.R.
Wetlan	d Reserves		
1	Hokera	13.75 sq. kms	Wetlands
2	Narkara	3.25 sq. kms	Wetlands
3	Malgam	4.50 sq. kms	Wetlands
4	Chatlam, Pampore	0.25 sq.kms	Wetlands
5	Manibugh	0.25 sq.kms	Wetlands
6	Mirgund	4.00 sq.kms	Wetlands
7	Shallabugh	16.00 sq.kms	Wetlands
8	Ajaz Jheel	1.00 sg.kms	Wetlands
9	Hygam	7.25 sq.kms	Wetlands
IJ	пууаш	1.20 Sq.KIIIS	wellanus

Table 2: Area under protection in Kashmir valley

# III. THE CONFLICT IN KASHMIR

The Kashmir conflict refers to the territorial dispute over Kashmir, the north westernmost region of South Asia. The parties to the dispute are India, Pakistan, China, and the people of Kashmir. India claims the entire former princely state of Jammu and Kashmir and presently administers approximately 43% of the region including most of Jammu, Kashmir Valley, Ladakh and the Siachen Glacier. India's claim is contested by Pakistan which controls approximately 37% of Kashmir, mainly Azad Kashmir and the northern areas of Gilgit and Baltistan. In addition, China controls 20% of Kashmir including Aksai Chin which it occupied following the brief

Sino-Indian War of 1962 and the Trans-Karakoram Tract, also known as the Shaksam Valley, that was ceded to it by Pakistan in 1963. [9]

Since 1987, disputed State elections have resulted in some of the state's legislative assembly forming militant wings, creating the catalyst for the insurgency, [10][11][12] the Indianadministered Jammu and Kashmir has been the site of conflict between the Indian Armed Forces, militants and separatists.

# IV. ARMED INSURGENCY AND MAN-WILDLIFE INTERFACE

Since the decade long armed insurgency in the conflict zone of Kashmir, the government of India has immensely increased and encouraged the presence of large consignment of armed forces in the dense forests. The razor wires have been deployed by the army interfere in the territories of wild animals. Due to human movement in the forests and the fencing of the line of control (LoC), the natural habitat of the wild animals has got disturbed; this is one of the reasons that they stray into human settlements. Unofficial figures put the number of army and paramilitary troops deployed in the state at around one million, which the officials disown. The army and paramilitary have set up camps in the forest areas where they believe militants often take refuge<sup>5</sup>. Presently there are over 671 security camps in Kashmir which occupy more than 90,000 acres of forest land. The army camps are now being turned into concrete bunkers and camps. Security forces have erected security fence along the 742-km-long LoC[13], which has had an impact on the natural habitat of wild animals in the process. The wild animals are very shy and are secretive breeders. Their breeding periods are also short and they are very selective in choosing their mate which precedes the mating dance or competition among the similar sexes of a particular species. This is one of the breeding behaviours they are known to show. Thus the presence of army or armed insurgents is also going to impact their breeding behaviour. The sound of any fire arm is going to disturb the behaviour of wild animal. It may either turn violent or may shy away from that spot. The armed personnel are also known to hunt the wild animals for meals or sport. The animals they hunt are small birds or animals. Such incidents often go unnoticed.

Human-animal conflicts have assumed proportions in the Himalayan valley- Kashmir. Every now and then we receive reports of attacks by wild animals causing death, injuries to human beings and livestock. In Jammu and Kashmir like other states in India, the interface between man and wildlife narrowed down as the explosion in human population in the 20<sup>th</sup> century pushed human settlements deep into the remotest parts of our wilderness. The entire countryside became a neighbourhood of man and wildlife. There was little legal protection for animals in the colonial times, with the result wildlife lost its habitat to agriculture and huge numbers to hunting and poaching. In Jammu and Kashmir 101 human deaths, 680 human injuries took place during the period from 2004-2008. In addition there have been some reports of considerable number of cattle depredations by common leopard (in and adjacent to forest areas of Jammu and Kashmir) snow leopard and Tibetan wolf (Ladakh & Kargil

areas) and crop raiding especially by black bears, which generally goes unreported, as there is no record of the extent of damage to crops so far. During the said period, 100's of wild animals, mostly black bears in south Kashmir and common leopards in north Kashmir got also killed in retaliation [14]. Over the last three years only, more than 50 people and some 500 animals have died in these conflicts<sup>[15]</sup>. But, in that period, more than 200 wild animals were also rescued and released into the wild by staff of the wildlife department<sup>[16]</sup>. Animals are often get killed, captured or are harmed in retaliation and these conflicts are a major threat to the continued survival of many species. In the winter of 2006 a frenzied mob burnt a bear to death in Kashmir's Tral town [17]. This was done despite the fact that killing it carries a prison sentence of 2-6 years and fine. Over the last few years there have been many such incidents where people have tried to capture the animals or kill them. The steadily decreasing forest cover, a result of legal and illegal deforestation and human encroachments into the forest, is a direct cause for increasing encounters between humans and animals. A bear was spotted near the United Nations Military Observers Group in India and Pakistan office at Sonwar, Srinagar. Pertinently, the forests overlooking the UNMOGIP office have been witnessing massive constructions from past few years disturbing the wildlife  $^{[18]}$ .

Other factors responsible for human-wildlife conflict are shrinkage of habitat due to expanding human population, livestock and developmental activities, changes in the land-use pattern, decline in the natural prey base, climate change and urbanisation <sup>[19]</sup>. Wild animals endangered by conflict with humans include the Asiatic Black Bear, Common Leopard, Rhesus Monkey Langur and Kashmiri Hangul. <sup>[19],[20],[21]</sup> The net result in all of the above is the decrease in forest cover. The forest cover of the state as per State of Forest Report 2003 issued by Forest Survey of India is 24214 sq kms which is 110 sq km less than the 2001 assessment. As per the report 1351 sq km of dense forests has degraded to either open forest, scrub or non-forest <sup>[22]</sup>.

## V. FOREST COVER CHANGE MATRIX

# AREA IN SQ. KM

2001	2003 Assessment				
	Dense Forests	Open Forests	Scrub	Non- Forest	Total 2001
Dense Forests	9790	1789	33	236	11848
Open Forests	550	8093	388	358	9389
Scrub	22	266	2475	324	3087
Non-Forest	135	622	51	197104	197912
Total 2003	10497	10770	2947	198022	222236**
Net Change	-1351*	1381	-140	110	
Source - State of Forest Report 2003					

Table 3

The decrease in dense forest cover is due to two reasons i.e. real changes as well as interpretational changes. The real decrease in dense forest cover is due to loss in forest area. Interpretational changes between subsequent assessments are due to reflectance of agricultural/ horticultural crops, which give reflectance similar to that of forest cover.

\*\* Includes 120848 Sq.Km Area outside LOC

# VI. FOREST COVER AS PER SATELLITE DATA INTERPRETATION

#### AREA IN SQ. KM

1 Very Dense 1557 545 2102 2 Moderately dense 6326 2069 8395 3 Open forest 7712 3058 10770	S.No	Forest cover Class	Forest Cover inside LOC	Forest Cover outside LOC	Total of 3 class
3 Open forest 7712 3058 10770	1	Very Dense	1557	545	2102
	2	Moderately dense	6326	2069	8395
4 T-t-1 Ft 15505 5673 51367	3	Open forest	7712	3058	10770
4	4	Total Forest	15595	5672	21267

Table 4

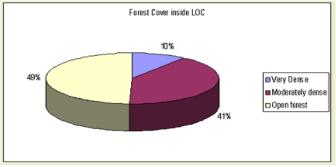


Figure 1

#### VII. CONCLUSION

Animals are often get killed, captured or are harmed in retaliation and these conflicts are a major threat to the continued survival of many species. Since the inception of armed insurgency in the conflict zone of Kashmir, the government of India has immensely increased and encouraged the presence of large consignment of armed forces in the dense forests. Due to human movement in the forests and the fencing of the LoC, the natural habitat of the wild animals has got disturbed; this is one of the reasons that they stray into human settlements. Shrinkage of habitat due to expanding human population, livestock and developmental activities, changes in the land-use pattern, decline in the natural prey base, climate change and urbanisation also lead to man wildlife-conflicts.

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