

MAN - WILDLIFE CONFLICT : CATTLE LIFTING AND HUMAN CASUALTIES IN KERALA

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Introduction

The forests in Kerala are highly fragmented due to settlements and enclosures. Indiscriminate poaching of wild animals has come down since the enforcement of the Wildlife Protection Act (1972). Consequent to this, incidence of crop damage by wild animals has increased in Kerala (Veeramani and Jayson, 1995). Direct man-wildlife conflict include crop depredation, injuries, casualties, cattle lifting, and damage to buildings and other properties. All aspects of man-wildlife conflict except the crop damage is discussed here.

Cattle lifting by carnivores in North India has been reported by Banerjee (1994) and Thosre and Mahajan (1994). Dwivedi (1982) reported that on an average 618 heads of cattle were killed by Tigers annually within an area of 413 km² in Bandhavgarh National Park. Human deaths due to Elephants have been reported from parts of Central India by Datye (1993). According to Santiapillai and Jackson (1990), Elephants kill about 100 to 200 people, each year in India. Injury to human beings from wild animals are common as shown by Mohan (1994) and Tiwari (1994) in Garhwal area. Man-wildlife conflict in Karnataka, especially between Elephants and man, has

been studied by Sukumar (1989) and Appayya (1992). No such study has been reported from Kerala. This paper assesses the extent of cattle lifting and human casualties due to wild animals in Kerala during the last decade.

Methods

Information on cattle lifting and human deaths for the period 1983-1993 due to wild animals were collected from the records of the Divisional Forest Offices and from discussions with the forest officials. The details gathered included animals involved in cattle lifting, human deaths, injury and damage to the property and details on compensation paid. Enquiries were also made with the settlers living in the areas adjoining forests to collect information on cattle lifting and human casualties in twenty randomly selected forest ranges.

Results

Cattle lifting : Cattle lifting was by Panther (*Panthera pardus*), Tiger (*Panthera tigris*) and Wild Dog (*Cuon alpinus*). Tiger was involved in twenty two attacks on Goats and twenty one cases of cattle lifting. Most of the incidences occurred when the cattle went for grazing in the forest areas during the day. Panther preyed upon Goat, Pig,

Table 1*Livestock killed by wild animals in Kerala during 1983 to 1993.*

Predator	Goat	(%)	Pig	(%)	Cow	(%)	Domestic	
							Dog	(%)
Tiger	22	(43.1)	-	-	21	(70.1)	-	-
Panther	19	(37.3)	5	(100)	7	(23.3)	3	(100)
Wild Dog	10	(19.6)	-	-	-	-	-	-
Wild Boar	-	-	-	-	1	(3.3)	-	-
Elephant	-	-	-	-	1	(3.3)	-	-
Total	51		5		30		3	

(-) No cases reported

Cow, and Dog and nearly all the incidents took place around the human habitations and majority of the attacks were at night (Table 1). Wild Dogs were involved in the attack on Goat, both around the human habitations and in the forest. Incidences of a Cow being killed by an Elephant and Wild Boar (*Sub scrofa*) were also reported during the period.

Compensation for cattle lifting : Wynaad Wildlife Sanctuary registered maximum cases of cattle lifting and the owners claimed an amount of Rs. 120,150 as compensation for the loss during the decade. Kerala Forest Department sanctioned an amount of Rs. 18,850 as compensation. Lowest amount was claimed in Mannarkad and Idukki Divisions and no compensation was given in Idukki and Munnar Divisions. A total of Rs. 1,86,350 was claimed as compensation for cattle lifting from all over Kerala but the Forest Department released only Rs. 36,600 (Table 2).

Human attacks and Compensation : A total of 31 deaths, 64 injuries to human beings and two house damages were reported during the period. Elephants were involved in 30 human deaths, 27 due to herds and three due to solitary tuskers. One death

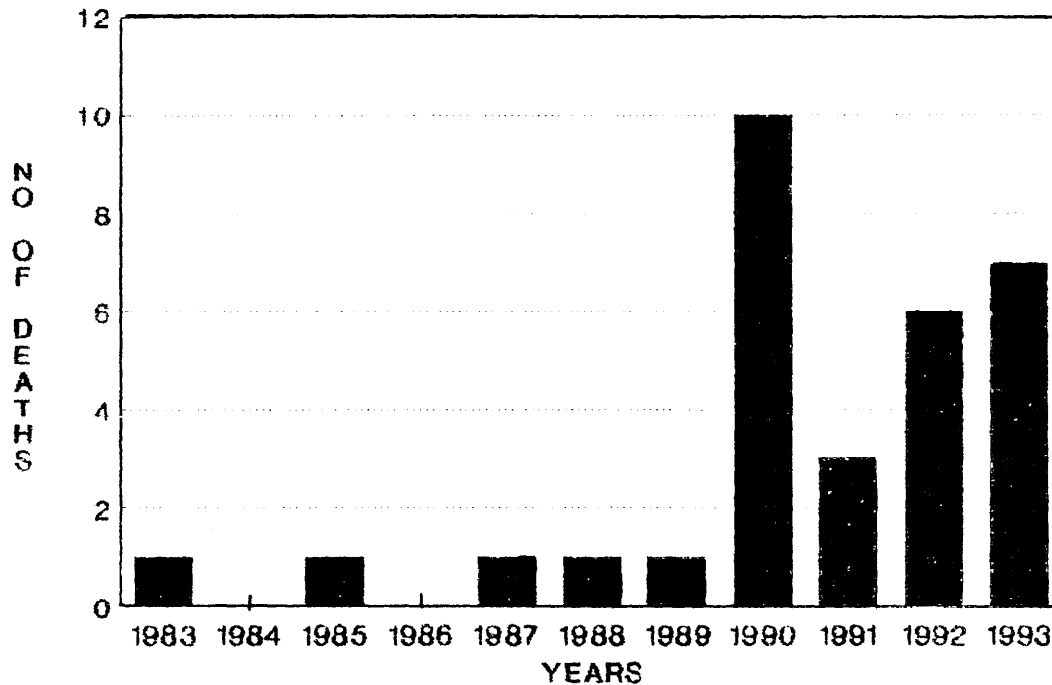
was due to Gaur in Parambikulam Wildlife Sanctuary. The highest number of deaths (10) were reported in 1990 followed by 1993, 1992 and 1991. In all other years, only one case each has been reported (Fig. 1). The higher number of deaths reported to the Forest Department after 1990 may be due to an increase in compensation offered by the department in the year.

Injury to people by wild animals is normally reported from the forest fringes,

Table 2*Compensation paid for cattle lifting by wild animals in Kerala during the period 1983 to 1993.*

Forest Divisions	Amount claimed (Rs.)	Amount sanctioned (Rs.)
Wynaad Wildlife	1,20,150	18,850
Kannur	18,700	6,850
Munnar	17,000	0
Periyar	12,500	3,000
Thrissur	10,000	4,900
Mannarkad	4,000	3,000
Idukki	4,000	0
Total	1,86,350	36,600

Fig. 1



Human deaths due to Wild Elephants in Kerala

Carnivores were highly involved in these types of conflict. There were 64 cases of injuries and 2 attacks on houses by wild animals. Out of these, Elephants were responsible for 32, Panther 14, Sloth Bear 8, Gaur 2, Tiger 2. House damages were all due to Elephants.

Compensation was claimed for all the wildlife attacks reported. Five thousand rupees was paid as compensation for a human death till the year 1989 and then it was increased to Rs. 10,000. Wynaad Wildlife Division registered the highest number of injury cases compared to other Divisions. The total amount claimed as compensation was Rs. 17,49,500 and the Forest Department sanctioned only Rs.1,25,150. In the North Wynaad and Vazhachal Divisions, there were no claims

for compensation, but the Forest Department has paid some money to the victims. A total of Rs.20,64,900 was claimed as compensation in the whole of Kerala and an amount of only Rs.2,95,000 was sanctioned (Table 3).

Control measures : To prevent the wild animals from entering the human habitations, high voltage electric fencing, trenches, chemical and mechanical methods are being employed in Kerala. In Wynaad Wildlife Sanctuary, Kerala Forest Department has erected a series of electric fences to stop the Elephants from entering the crop fields and villages. Electric fences and trenches were effective in controlling the wild animals. Use of crackers, torches, shouting from machans etc. were the methods used to chase the animals from the

Table 3

Compensation paid for death and injury to the humans and damage to property due to wild animals in Kerala during the period 1983 to 1993.

Forest Divisions	Amount claimed (Rs.)	Amount sanctioned (Rs.)
Wynaad Wildlife	17,49,500	1,25,150
Munnar	96,000	5,000
Thrissur	45,000	6,000
Parambikulam	31,750	25,350
Idukki	30,500	25,500
Chalakudi	28,650	5,000
Kottayam	17,000	0
Nilambur North	16,000	15,800
Palakkad	10,000	10,000
Mannarkad	10,000	20,000
Nilambur South	9,000	1,900
Nemmara	9,000	6,500
Trivandrum Wildlife	5,500	36,000
Kannur	5,000	750
South Wynaad	2,000	750
North Wynaad	0	1,300
Vazhachal	0	10,000
Total	20,64,900	2,95,000

crop fields and villages. At some places, the villagers were using dogs to chase the wild animals, but occasionally elephants chased the dogs back into human habitation and in the process destroyed, the properties.

Discussions

Cattle lifting is reported from all the

forest areas in Kerala, however, the incidence seems to be far less than that reported by Dwivedi (1982) in Central India. Tiger and Panther was involved in the majority of cattle lifting cases reported. Sawarkar (1986) reported that the cattle lifting by Leopard is common throughout its range but there is no hard data as in the case of Tiger or Asiatic Lion.

The amount sanctioned by the Forest Department is much lower than the compensation claimed. It was also reported that the payment of compensation was usually delayed, considerably or even that compensation was not paid in many cases due to the paucity of funds. During the last decade the human casualties due to wild Elephants is on the increase in Kerala. At present, Kerala is reported to have a population of about 4,300 Elephants (Anon., 1993). Deaths were more due to herds than solitary tuskers contradicting the general belief that tuskers are more aggressive. Field observation in some areas shows villagers entering the forest to collect NTFPs like reed, firewood, honey and medicinal plants were also killed. Similar observations have been reported from North Bengal (Dey, 1991). Electric fences using energizers, effective against Elephants, can be installed wherever the man-wildlife conflict is a serious problem. Proper education of the local settlers about the behaviour of animals will also reduce the conflict. Resettling of enclosures to outside areas may also solve the problem to a certain extent.

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SUMMARY

Information on man-wildlife conflicts in Kerala during the period 1983-93 were collected from the office records of the Divisional Forest Offices and by Visiting areas from where man-wildlife conflicts were reported. Cattle lifting was mainly due to Panther (*Panthera pardus*) Tiger (*Panthera tigris*) and Wild Dog (*Cuon alpinus*). Eighty nine cattle lifting cases were reported during the period. Thirty one human deaths and 64 injury cases were also reported, mostly due to Elephants. Out of the total compensation claimed for cattle lifting only 20% was disbursed and only 14% were disbursed for human casualties. Electric fences using energizers may solve the problem temporarily. Resettling of villagers from inside the forest areas is also advisable.

मानव और वन्य प्राणियों का संघर्ष - केरल में गाय बैल उठाना तथा मानव को मारना

ए० वीरमणी, ई०ए० जयसन व पी०एस० एआसा

सारांश

केरल में 1983-93 की अवधि के दौरान चले मानव-वन्य प्राणि संघर्ष की जानकारी वन मण्डल अधिकारियों के कार्यालयों के कागज-पत्रों तथा उन क्षेत्रों में जाकर, जहाँ मानव-वन्य प्राणि संघर्ष होने की सूचना मिली थी, इकट्ठे किए गए हैं। गाय बैलों को उठाने का काम प्रधानतः तेन्दुओं (पैन्थेरा पाइस), बाघ (पैन्थेरा टाइग्रिस) और जंगली कुत्तों (कुवोन एल्पाइनस) ने किया है। इस अवधि में गाय-बैल उठाने की 89 वारदात सूचित हुई व 31 मानव हत्याएं तथा 64 क्षति पहुँचाने की घटनाएँ, मुख्यतः हाथियों द्वारा, सूचित की गई। पशुओं को उठाने के लिए प्रस्तुत किये गए दावों में से मांगे कुल हरजाने का केवल 20% भुगतया गया तथा केवल 14% हरजाना मानवों के मारे जाने का दिया गया। तार बाड़ में बिजली दौड़ा कर समस्या अस्थाई तौर पर सुलझ सकती है। वन क्षेत्रों के अन्दर से ग्रामवासीयों को निकालकर उन्हें अन्यत्र बसाना भी वांछनीय रहेगा।

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