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RESEARCH ARTICLE

DYNAMICS OF HUMAN-TIGER CONFLICT IN CORBETT LANDSCAPE, RAMNAGAR FOREST DIVISION, A CURRENT SCENARIO

*Sanjeev Kumar

Research Scholar, Government P.G. College, Ramnagar, Uttarakhand, India

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ABSTRACT

Human-tiger interaction is an important issue around the world. Now the movement of tiger in human-dominated landscapes or Human movements in tiger-dominated landscapes both are troublesome and dangerous for man and tiger. Dwelling of man in the forest for domestic purpose (fuel wood, fodder, livestock grazing etc.) in one hand and movement of tiger in human-dominated for livestock predation or easy prey leads conflict. There may be another ecological cum sociological of such type of movement of tiger. Tiger is more intelligent animal. This species are also developing social intelligence towards human dominated landscape. Ramnagar forest division is a vital habitat linked to Corbett Tiger Reserve along with Kosi River. Kosi corridor is situated in between Corbett Tiger Reserve and Ramnagar Forest division along with Kosi River. Corridors are rich for genetic viability of habitat. But now a days this corridor is near about to vanish due to anthropogenic stress (Resort and Hotels etc.). Villages like Kyari, Patkote, Sunderkhal, Tedha, Simalkhet etc. are prone to conflict and livestock predation. This study predicts the future problem and dynamics and consequences of human-tiger conflict in Corbett landscape with special reference to Ramnagar Forest Division.

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INTRODUCTION

Conflict is an important issue. Presence of tiger in human-dominated landscape is critical and dangerous for both the tiger and human beings. Same as like as presence of Man in the tiger dominated landscape (core area) is troublesome at all. Ramnagar Forest Division is a viable habitat for tiger along with Kosi River (Kosi corridor). Kosi River is situated between the Corbett Tiger Reserve and Ramnagar Forest Division. Villages like Sunderkhal, Mohan, Ringora, Kyari, Tedha, and Dhikuli etc are situated along with the Kosi River and depict the conflict cases, livestock predation. Movement of tiger is very frequent in these areas. These two vital habitats are compliment to each other along with Kosi River.

Total near about 800 cattle lifting cases were find out in seven years. Rests of 16 cases from April 2015 to July 2015 were recorded. The affected area were Sunderkhal, Mohan, Kyari, Patkote, Chousla, Tedha, Bohrakot, Simalkhet, Sonjala, Nayujala, Dhoniya, Riyal Malva, Bajuniya haldu, Naini etc . Ecologically we cannot check and control the movement of tiger from core to human settlements. But after ecological cum sociological analysis of tiger movement we can predict or assume the exact cause of tiger movement in human areas. Questionnaire survey predicts the situation while on the other hand date collected from forest officials showing the severe

conflicts in the form of frequent movement and livestock predation in the area. Serious mitigation plan are needed on the ground of sociological cum ecological study of area with its dynamics .Prey biomass and study on ecological stress of tiger habitat is highly recommended.

MATERIALS AND METHODS

Conflict data had been collected from Ramnagar forest division. Questionnaire survey and informal interviews of key person for tiger movement in some villages of Ramnagar forest division.

Study Area

Ramnagar Forest Division had been chosen for this study. This forest division is very vital along with Kosi River in between the Corbett Tiger Reserve and Ramnagar forest division. This corridor is very vital but due to anthropogenic stress vanishing day by day. Finally this corridor is about to vanish. Villages in the Ramnagar forest division near to Corbett have been selected to questionnaire survey to collect the data of tiger movement in human- dominated areas.

Methodology

Semi structured (open and close ended question) questionnaire survey had been conducted in villages like Sunderkhal, Mohan, Chukam, Tedha, Pawalgarh, Kyari, Patkote, Chousla,

*Corresponding author: Sanjeev Kumar

Research Scholar, Government P.G. College, Ramnagar, Uttarakhand, India.

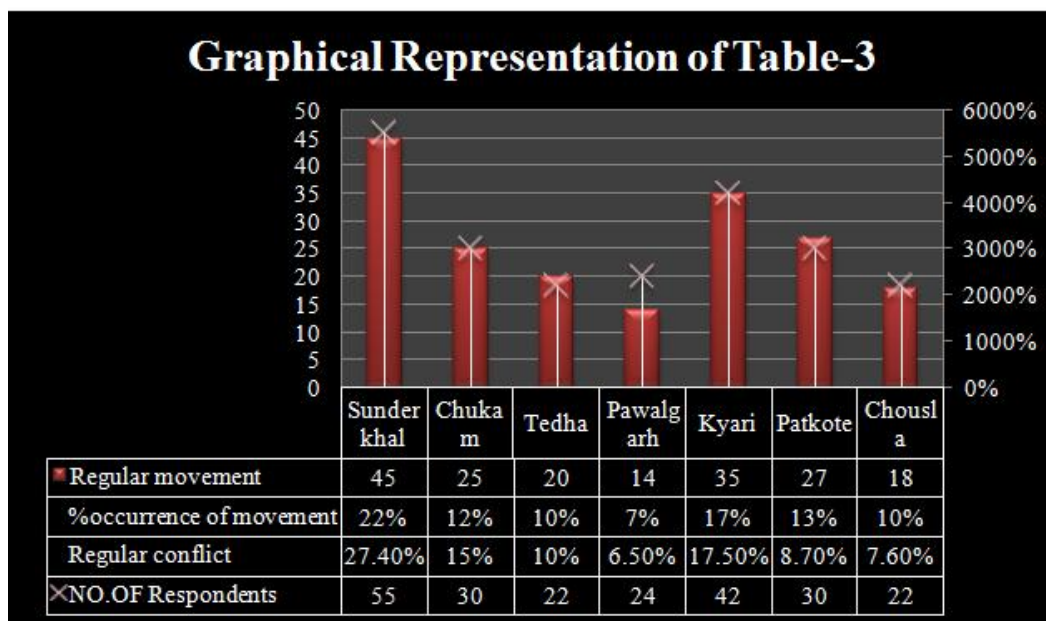
Table 1. Year wise details of cattle lifting and conflict in Ramnagar forest division

Year	Cattle				Human				Total
	No. of cases of cattle lifting/Injured by Tiger				No. of cases killing/injured by Tiger				
	Kills		Injury		Kills		Injury		
	Core Area	Buffer Area	Core Area	Buffer Area	Core Area	Buffer Area	Core Area	Buffer Area	
2008-09	-	196	-	-	-	1	-	-	197
2009-10	-	73	-	-	-	1	-	1	75
2010-11	-	112	-	-	-	1	-	-	113
2011-12	-	123	-	-	-	-	-	3	126
2012-13	-	110	-	-	-	-	-	2	112
2013-14	-	183	-	-	-	1	-	-	184
TOTAL	-	797	-	-	-	4	-	6	807

Table 3. Data of conflict and tiger movement pattern in area

Village	Res.	Movement pattern/sighting		Regular Chance of conflict		% occurrence
		Reg.(r)	%occurrence Of r	Irr.		
Sunderkhal	55	45	22%	10	50	27.4%
Chukam	30	25	12%	5	28	15%
Tedha	22	20	10%	2	18	10%
Pawalgarh	24	14	7%	10	12	6.5%
Kyari	42	35	17%	7	32	17.5%
Patkote	30	27	13%	3	16	8.7%
Chousla	22	18	10%	4	14	7.6%
Simalkhet	21	17	8%	4	12	6.5%
TOTAL	246	201	81%	45	182	

Key- RES= Respondent, IRR=Irregular, %= percentage

**Fig-1-Graphical representation of survey data of conflict and Movement pattern of tiger**

Bohrakot, Simalkhet, Sonjala, Nayujala, Dohniya, Choi and Gabua etc. Results of collected data from Ramnagar forest division, and questionnaire survey had been represented graphically with appropriate statistics. These villages are prone to tiger conflict.

RESULTS AND DISCUSSION

Table 1 depicts the severe conflict and livestock predation. Total near about 800 conflict cases had been reported from forest official record. On the other hand near about 10cases with human beings. Table 2 provides the current scenario of human-tiger conflict and its dynamics for future perspectives.

The condition is very critical. Regular incident of conflict lingers on day. Even in current scenario the severe condition depicting from Aril 2015-July 2015. The data shows that the regular movement of tiger in the human-dominated areas. Livestock predation cases are also recorded severely in a short spawn of 4 months. Survey Table3) had conducted in some villages regarding conflict and tiger movement pattern of tiger in the villages.

Discussion

Overall all the data indicates the critical condition. Such type of condition creates anti attitude for tiger conservation.

Table 2. Recent conflict cases from April 2015- July 2015

Month	Date	Cattle	Place
April	5-4-2015	√	Patkote
April	9-4-2015	√	Chousla,Naini
April	9-4-2015	√	Gadkila,Naini
April	11-4-2015	√	Chukam
April	11-4-2015	√	Tedha
April	19-4-2015	√	Naini
April	20-4-2015	√	Malan.Aamgarhi
April	28-4-2015	√	Jalal ganv,Mangoli
May	8-5-2015	√	Simalkhet
May	19-5-2015	√	Tedha
May	27-5-2015	√	Sunderkhal
June	11-6-2015	√	Simalkhet
June	16-6-2015	√	Tedha
June	28-6-2015	√	Panchyat Dolla P.O.Sanara
July	17-7-2015	√	Sunderkhal
July	22-7-2015	√	Bajuniya haldu, Naini
July	27-7-2015	√	Sarna.Naini

Livestock predation develop the negative attitude while on the other hand the conflict cases and movement pattern of tiger in the human-dominated areas like villages attract the poaching habit and practices in the nearby areas which linked to Corbett Tiger Reserve. At least anthropogenic stress like mining for sand and gravels (Choi and Gabua etc.) should be control at any rate. Prey biomass of core area should be recorded properly for vital survival of tiger in the area which may be the most important deciding factor for tiger movement in the human-dominated area for livestock predation etc.

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