

# Human – Elephant Conflict in Eastern Nepal: A Case Study of Bahundangi VDC, Jhapa District



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**A Dissertation Submitted in Partial fulfilment of the Requirements  
for the Degree of Master's of Science, Central Department of  
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**Tribhuvan University  
Kirtipur, Kathmandu, Nepal**

**May, 2011**

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**DECLARATION**

I hereby declare that the work presented in this dissertation has been done myself and has not been submitted elsewhere for the award of any degree. All sources of information have been specifically acknowledged by references to the authors and institution.

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I hereby recommend that the dissertation entitled "Dissertation" written by  
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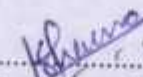
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**LETTER OF APPROVAL**

On the recommendation of Supervisor Mr. Hari Prasad Sharma, Lecturer, this dissertation submitted by Kamal Nepal entitled "**Human–Elephant Conflict in Eastern Nepal: A Case Study of Bahundangi VDC, Jhapa District**" is approved for examination and submitted to the Tribhuvan University for the partial fulfillment of the requirements for Master's Degree of Science in Zoology with special paper Ecology.

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This dissertation work submitted by Kamal Nepal entitled "**Human–Elephant Conflict in Eastern Nepal: A Case Study of Bahundangi VDC, Jhapa District**" has been approved for the partial fulfillment of the requirements for the Master's Degree of Science in Zoology with Ecology as specialization paper.

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## ABSTRACT

Bahundangi VDC is located in the northern part of Jhapa District. It lies north from the East-West Highway on the bank of Mechi River. Wild elephants were frequently visiting in ward no. 1, 2, 8 and 9 of VDC as they lie along bank of Mechi River. These were seriously affected by elephant incursion since many years ago. The problems are increasing year by year. The research aimed to identify the level of conflict between local people and elephants carried out in 2008. A total of 43.87%, 51.80% and 4.36% of maize, paddy and millet have been damaged by wild elephants. Similarly, 248 plants of bettle nut, 130 coconut and 2120 of bamboo in different bunches were damaged in the study area. The total estimated economic loss of Rs.25,45,493.8 the loss were Rs.10,96,756.8, Rs.11,03,260, Rs.1,20,757, Rs. 84,800, Rs. 1, 30,000/- and Rs. 9,920/- for paddy, maize, millet, bamboo, coconut and bettle nut respectively. Twenty one people were killed by elephants in Jhapa district in last 20 years (1988-2008) in which 8 people were killed in Bahundangi VDC. Elephants with Calves were more dangerous than others groups and the highest intensity occurred in June-August and November- December. Shouting and chasing elephants with fire flames and foggy lights which were the most common local preventive measures. Various intervention methods were used by farmers. The highest effectiveness was found to be shouting and chasing with foggy light and fire. I proposed the use of fences and spotlights be propounded in conjugation with long term habitat protection besides the government should provide effective compensation to the effected farmers, train farmers to deter elephants and formulize transboundary co-operation with India to mitigate human-elephant conflict in Eastern Nepal.

**Key Works:** Wild elephants, depredation, crops, conflicts and local people

## List of contents

	<b>Page No.</b>
<b>Declaration</b>	I
<b>Recommendation</b>	II
<b>Letter of Approval</b>	III
<b>Certificate of Approval</b>	IV
<b>Acknowledgement</b>	V
<b>Abstract</b>	VI
<b>Lists of tables, Figures and Plates</b>	VII-X
<b>List of Abbreviations</b>	XI
<b>List of Contents</b>	XI-XIV
<b>1 Introduction</b>	<b>1-7</b>
1.1 General Background	1
1.2 Distribution	1
1.2.1 Global distribution	1
1.2.2 Elephants in Nepal	2
1.3 Ecology and Behaviour	3
1.4 Human – Elephant Conflict	4
1.5 Crop depredation	5
1.6 Elephant Conservation	5
1.7 Objective of the study	6
1.8 Limitation of the study	6



1.9	Rationale of the study	7
<b>2</b>	<b>Study Area</b>	<b>8-</b>
<b>10</b>		
2.1	Description of the study area	8
2.2	Climate	8
2.3	Geology and Soil	9
2.4	Flora	9
2.5	fauna	9
2.6	Social and Economic characters	9
2.7	Land use pattern	10
2.8	Animal husbandry	
10		
2.9	Farming System	10
<b>3.</b>	<b>Literature Review</b>	<b>11-14</b>
<b>4.</b>	<b>Methodology</b>	<b>15-</b>
<b>17</b>		
4.1	Reconnaissance survey	15
4.2	Data collection	15
4.2.1	Questionnaire Survey	15
4.2.2	Secondary data collection	15
4.3	Sampling	15
4.3.1	Selection of sampling wards	16

4.4	Field Survey	16
4.5	Total expected production survey	16
4.6	Data Analysis	17
<b>5.</b>	<b>Results</b>	<b>18-38</b>
5.1	Analysis and status of study area	18
5.1.1	Land composition	18
5.1.2	Agriculture productivity	19
5.1.3	Number of Survey household and its percentage	19
5.1.4	Total cultivated land and land holding per family	20
5.1.5	Land coverage of different crops in different areas	21
5.1.6	Crop production	21
5.1.7	Total Expected Production	24
5.1.8	Total loss of different crops in different areas	25
5.1.9	Market price and monetary value of damaged crops	28
5.2	Frequency and Seasonality of crops raiding	29
5.3	Extent of crop damage by elephant with calves	31
5.4	Crop damage and crop preference at different stage of growth	31
5.5	Household food sufficiency	31
5.6	Reason for elephant visiting	32
5.7	Human harassment	32
5.8	Other Economic Burden	35

5.9	Local preventive measures	35
	5.9.1 Compensation and evaluation of effectiveness	37
5.10	Mode of wild elephant incursion	38
<b>6.</b>	<b>Discussion</b>	<b>39-</b>
<b>42</b>		
<b>7.</b>	<b>Conclusion and Recommendations</b>	<b>43-</b>
<b>45</b>		
7.1	Conclusion	43
7.2	Recommendations	43
<b>Platelets</b>		<b>46-</b>
<b>48</b>		
<b>References</b>		<b>49-</b>
<b>53</b>		
<b>Appendix</b>		<b>54-</b>
<b>65</b>		

## LIST OF TABLES

Table-1	:	Estimated number of Asian elephants and their distribution
Table-2	:	Sample size in each affected wards of Bahundangi VDC
Table-3	:	Status of land composition
Table-4	:	Status of agriculture productivity
Table-5	:	Number of population in sampled households
Table- 6	:	Ward wise distribution of cultivated land
Table-7	:	Areas coverage in different household in number and land volume
Table-8	:	Total production (in kg) and production percentage (%) of crops
Table-9	:	Total production in kg and percentage
Table-10	:	Expected production (kg)
Table-11	:	Total loss of paddy (kg) in terms of expected production
Table-12	:	Total loss of Maize (kg) in terms of expected production
Table-13	:	Total loss of millet (kg) in terms of expected production
Table-14	:	Total loss of crops (kg) in sampled household in respective wards
Table-15	:	Total loess of crops (kg) in terms of expected production and loss percentage
Table-16	:	Economic loss of different crops
Table-17	:	Per head loss (NC) per hectare due to crop damage by wild elephants
Table-18	:	Seasonal intensity of crop damage (%) based on questionnaire (N=156)

- Table-19 : Response for elephants with baby elephant
- Table-20 : Responding household food sufficiency
- Table-21 : Reason and percentage of elephant visiting in settlements
- Table-22 : Numbers of victims on the basis of Age and Sex
- Table-23 : Distribution of victims on the basis of Age and Sex
- Table-24 : Numbers of casualties and injuries on the basis of Age and Sex
- Table-25 : Methods used to deter elephant in Bahundangi VDC
- Table-26 : Main flora of the Study Area
- Table-27 : Main fauna of the Study Area
- Table-28 : Local market price for the year 2008/2009 in Jhapa District
- Table-29 : Monthly variation in average monthly temperature (°c) for the year 2006 Jan. – 2006 Dec. recorded at Jhapa District
- Table-30 : Monthly variation in average monthly Rainfall (mm) for the year 2006 Jan. – 2006 Dec. recorded at Jhapa Districts
- Table-31 : Population of ward wise and sex – wise distribution
- Table-32 : Number of selected household and its sex- wise distribution
- Table-33 : Land use pattern in Jhapa district

## LIST OF FIGURES

- Figure-1 : Crop yield (kg) in different wards
- Figure-2 : Maize yield (%) in different wards
- Figure-3 : Paddy yield (%) in different wards
- Figure-4 : Millet yield (%) in different wards
- Figure-5 : Total production and production percentage (%) of crops
- Figure-6 : Total loss of crops in terms of expected production
- Figure-7 : Percentage of crops loss
- Figure-8 : Seasonal intensity of crop loss in Bahundangi VDC
- Figure-9 : Methods used to deter elephant in Bahundangi VDC
- Figure-10 : Monthly variation in average monthly temperature (°C) for the year 2006 – 2007 recorded at Jhapa District
- Figure-11 : Monthly variation in average monthly rainfall (mm) for the year 2006 Jan. – 2006 Dec. recorded at Jhapa District
- Figure-12 : Land use pattern in Jhapa district

## LIST OF PHOTO PLATES

- Plate-1 : Ripe paddy trampled by elephants
- Plate-2 : Elephants guarding tower
- Plate-3 : Author interviewing with local people
- Plate-4 : Electric fence at the edge of Mechi River
- Plate-5 & 6 : Foot print of elephants
- Plate-7 & 8 : House demolished in search of grains
- Plate -9 : Local people showing beetle nut destroyed by elephants
- Plate-10 : Paddy cultivation nearby Mechi River
- Plate-11 : Mechi River
- Plate-12 : Livestock grazing inside the Mechi River
- Plate-13 : Tea cultivation
- Plate-14 : Torchlight

## LIST OF ABBREVIATIONS

BNP	:	Bardia National Park
CNP	:	Chitwan National Park
CITES	:	Convention on International Trade of Endangered Species
CBS	:	National Population Census
CDZ	:	Central Department of Zoology
DNPWC	:	Department of National Park and Wildlife Reserve
DFRS	:	Department of Forest Resources Survey
EBC	:	Elephant Breeding Centre
FAO	:	Food and Agriculture Organization
FUG	:	Forest User Group
GoN	:	Government of Nepal
HHs	:	Households
IUCN	:	International Union of Conservation of Nature and Natural Resources
Kg	:	Kilogram
Km	:	Kilometer
MPFS	:	Master Plan for Forestry Sector
MoFSC	:	Ministry of Forest and Soil Conservation
NAD	:	Net Area Damage
No.	:	Number
Nrs.	:	Nepalese rupees
%	:	Percentage
PAs	:	Protected Areas



SWR : Shuklaphanta Wildlife Reserve

Sq. : Square

TAL : Terai Arc Landscape

TU : Tribhuvan University

UNHCR : United Nations High Commission on Refugees

VDCs : Village Development Committee

WWF : World Wildlife Fund