

**WILDLIFE-PEOPLE CONFLICT:  
ASSESSMENT OF CROP DEPREDATION  
BY WILDLIFE AROUND  
BARANDABHAR CORRIDOR FOREST**



**BY  
KHAGENDRA PRASAD DHAKAL**

**A Dissertation Submitted in Partial Fulfilment of the  
Requirement for the M. Sc. Degree in Zoology  
(Ecology Programme)**



**Central Department of Zoology  
Institute of Science and Technology  
Tribhuvan University, Kathmandu, Nepal  
2006**

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TRIBHUVAN UNIVERSITY  
CENTRAL DEPARTMENT OF ZOOLOGY  
Kirtipur, Kathmandu  
NEPAL

## RECOMMENDATION

This is to certify that Mr. Khagendra Prasad Dhakal has completed his dissertation work entitled "**WLLDLIFE-PEOPLE CONFLICT: ASSESSMENT OF CROP DEPRADATION BY WILDLIFE AROUND BARANDABHAR CORRIDOR FOREST**" as a partial fulfilment of the M. Sc. Degree in Zoology, Ecology-Specialization, under my supervision. This is the candidate's original work, which brings out important findings essential for biodiversity conservation. It is my pleasure to recommend this work for the partial fulfilment of Master of Science in Zoology at Tribhuvan University.

I recommend that the dissertation be accepted for the partial fulfilment of the requirement for the Degree of Master of Science in Zoology specializing in Ecology.

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## **APPROVAL**

This dissertation submitted by Mr. Khagendra Prasad Dhakal entitled "**WLLDLIFE-PEOPLE CONFLICT: ASSESSMENT OF CROP DEPRADATION BY WILDLIFE AROUND BARANDABHAR CORRIDOR FOREST**" has been accepted for partial fulfilment of the requirement for the Master's Degree of Science in Zoology specializing in Ecology.

## **EXPERT COMMITTEE**

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## Abstract

*Chitwan National Park (CNP), first national park established in 1973 and enlisted as world heritage site in 1984, covers an area of 932 square km and is located in the southern Terai of Nepal. Crop loss due to wild animals has created serious problem in all parts adjoining agricultural lands of the national parks and forest areas in Nepal. Four basic causes of conflict in the area are loss of human life, livestock depredation and crops damage by wild animals, and natural resources consumption / sharing practices. Since BCF is amalgamated with Mahabharat range and RCNP, its function to act as a biological corridor between these two biologically potential areas is crucial.*

*This study was carried out from April 2004 to May 2005: to assess the problems attributed to crop damage and estimate the monetary value of crop loss by wild animals in the adjoining areas of BCF. Random questionnaire survey was done in 441 households within the distance of one km from the forest boarder. Extent of damage in paddy, mustard, lentil, maize, and vegetables field was taken by interviewing the local people (GAD) as well as the visits of damage field (NAD). Analysis was based on descriptive statistics aided with MS Excel and SPSS software.*

*NAD estimation showed a heavy economic loss of total worth NRs. 1779579.92 for 2004/2005 production year. NAD estimation was found to be 1.5 times less than the GAD estimation. There was more damage in the eastern part (NRs. 275796.29) than in western part (NRs. 751891.71). The average crop loss per household per annum was NRs. 6244.14. Highest loss occurred to paddy (29.37%) followed by vegetables (27.77%), maize (17.55%), mustard (11.24%), lentil (11.23%) and wheat (2.88%). Comparatively, highest damage occurred in Zone I followed by Zone IV, II and III respectively. Of the wild animals, rhinoceros was the number one crop-raiding animal followed by wild boar, deer, parakeets and elephant. Crop preferences of wild animals varied in different growing stages and loss varied with the distance from the forest.*

*The main source of conflict is crop damage and human harassment due to wild animals. Pressure of crop damage made it very difficult to live a substantial life for poor people and creates conflict between local people and wildlife. Other sources of conflict include increasing fuel wood and fodder demand, cattle grazing, fishing, poaching, forest fire and illegal hunting. Traditional measures related to crop protection, adopted by farmers, include Machan guarding, deterring crop-raiding animals by shouting and clapping, noise making by beating the canisters and fire sticks.*

*Based on the present study, biological, physical and socio-economic measures are recommended to halt further depredation of crop and alleviate the wildlife-people conflict attributed to crop damage problem.*

**Key words:** Biodiversity, eco-tourism, agroforestry, crop damage, buffer zone, community forestry, ethnic value, and socio-economy.

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