# PARK-PEOPLE CONFLICT IN SHIVAPURI NAGARJUN NATIONAL PARK: A CASE STUDY OF SUNDARIJAL VILLAGE DEVELOPMENT COMMITTEE, KATHMANDU DISTRICT, NEPAL



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A thesis submitted in partial fulfillment of the requirements for the award of the degree of Master of Science in Zoology with special paper Ecology.

### Submitted to

Central Department of Zoology Institute of Science and Technology Tribhuvan University Kirtipur, Kathmandu Nepal February, 2012

#### RECOMMENDATIONS

This is to recommend that the thesis entitled "**Park-People Conflict in Shivapuri Nagarjun National Park: A Case Study of Sundarijal Village Development Committee, Kathmandu District, Nepal**" has been carried out by Mr. Megharaj Bajagain for the partial fulfillment of Master's Degree of Science in Zoology with special paper Ecology. This is his original work and has been carried out under my supervision. To the best of my knowledge, this thesis work has not been submitted for any other degree in any institutions.

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On the recommendation of supervisor "Dr. Ramesh Shrestha" this thesis submitted by Megharaj Bajgain entitled **"Park-People Conflict in Shivapuri Nagarjun National Park: A Case Study of Sundarijal Village Development Committee, Kathmandu District, Nepal"** is approved for the examination and submitted to the Tribhuvan University in partial fulfillment of the requirements for Master's Degree of Science in Zoology with special paper Ecology.

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This thesis work submitted by Megharaj Bajagain entitled "Park-People Conflict in Shivapuri Nagarjun National Park: A Case Study of Sundarijal Village Development Committee, Kathmandu District, Nepal" has been accepted as a partial fulfillment for the requirements for the Master's Degree of Science in Zoology with special paper Ecology.

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#### DECLARATION

I hereby declare that the work presented in this thesis 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 reference to the author(s) and institution(s).

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#### ABSTRACT

The study of park people conflict was conducted in Sundarijal VDC of Kathmandu district, located adjacent to north-eastern side of Shivapuri Nagarjun National Park. The whole VDC was represented the study area. The area was seriously affected by wildlife. The problems are increasing year by year. The research aimed to identify the level of conflict between local people and wildlife carried out in 2010/11. The survey was done in 121 households by both questionnaire and NAD method to assess crop and livestock depredation by wildlife for the year 2010-2011. Crop damage amounting 101152.94 kg was found due to wildlife in the study area. The study estimated economic loss of crop was RS. 1803982.68 of which 11.05% to paddy, 3.45% to wheat, 20.38% to maize, 5.20% to millet, 4.22% to mustard and 55.70% to potato. The economic loss was Rs. 14,908.95 per household on an average.

As wild boar was a serious pest species of crop, 32.07% followed by porcupine (17.56%), rats (14.15%), monkey (13.42%), deer (12.89%), bear (5.87%) and birds (4.04%). The total economic loss of livestock and avian stock was Rs. 293400 in Sundarijal VDC and average loss was Rs. 2446.44 per household. Traditional preventive measures include machan, fence and various types of scaring devices, which are partially successful to chase wild animals. The conflict between the park and the local people arose by the both sides.

Key Works: Wild animals, depredation, crops, conflicts and local people

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## LIST OF ABBREVIATIONS

Abbreviated form	Details of abbreviations
BNP	Bardia National Park
Cm	Centimetre
CITES	Convention on International Trade of Endangered
Species	
CNP	Chitwan National Park
CNPPA	Commission on National Parks and Protected Areas
DNPWC	Department of National Park and Wildlife Conversation
Hh	Household
IUCN	International Union for Conservation of Nature
Kg	Kilogram
Km	Kilometre
NAD	Net Area Damage
NPWC	National Park and Wildlife Conversation
Rs.	Rupees
Nrs.	Nepalese rupees
%	Percentage
ShNNP	Shivapuri Nagarjun National Park
SPWR	Sukla Phanta Wildlife Conversation
SIWDP	Shivapuri Integrated Watershed Development Project
SWWR	Shivapuri Watershed and Wildlife Reserve
UNESCO	United Nations Educational, Scientific and Cultural
	Organization
VDC	Village Development Committee
WCMC	World Conservation Monitoring Centre
WWF	World Wildlife Fund