

**BIODIVERSITY CONSERVATION GENERATED LIVELIHOOD
OPTIONS IN THE SOUTHERN SIDE OF SHIVAPURI NATIONAL
PARK**



By

Shanta Adhikari

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF MASTER OF SCIENCE

CENTRAL DEPARTMENT OF ZOOLOGY-ECOLOGY PROGRAM

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**A Thesis Submitted for the Partial fulfillment of the Requirements
for the Master's Degree of Science**

**In
Zoology (Ecology)**

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October 2009

DECLARATION LETTER

I hereby declare that the work presented in this thesis has been done myself and has not been submitted anywhere else for the award of any degree. All sources of information have been specifically acknowledged by reference to the authors or institutions.

Date.....

Signature

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RECOMMENDATION

It is my pleasure to mention here that Ms. Shanta Adhikari has carried out the thesis entitled **“Biodiversity Conservation Generated Livelihood Options in the Southern side of the Shivapuri National Park”** under my supervision. This is the candidate’s original work and to the best of my knowledge, this thesis work has not been submitted to any other degree.

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LETTER OF APPROVAL

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This thesis submitted by Ms. Shanta Adhikari entitled “**Biodiversity Conservation Generated Livelihood Options in the Southern side of the Shivapuri National Park**” has been approved as a partial fulfillment of requirements for the Degree of Master of Science in Zoology (Ecology).

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ABSTRACT

The research was conducted on biodiversity conservation generated livelihood options in two VDCs in the Southern side of Shivapuri National Park. The research explored both direct and indirect methods including field survey, identification of feces (scats or pellets), scratches, and questionnaire survey. Five mammalian species belonging to three orders and five families and nineteen tree species were recorded in their habitat. Conducting questionnaire survey in 102 households of the two VDCs, an annual loss of Rs 1,51,783.56- rice (Rs 68437.50), wheat (Rs 10899.00), maize (Rs 58692.00), and millet (Rs 13755.00) was estimated which were the most raided crops in both VDCs. Wild boar, monkey, and porcupine were the main crop raiders. The local people had adopted different techniques of crop protection, which were less effective. There was no significant difference in crop loss for paddy ($t=0.7$, $d.f=85$, $P>0.05$), wheat ($t=1.929$, $d.f=77$, $P>0.05$), and maize ($t=1.959$, $d.f=86$, $P>0.05$). But the analysis showed a significant difference ($t=3.173$, $d.f=74$, $P<0.00$) in loss of millet between the VDCs. A total of 1.878 ha of land was abandoned in Nayapati and Gagalphedi VDCs due to crop depredation by wildlife (3.66 %), lack of man power (2.182 %), irrigation problem (0.078 %), and also due to natural factor like soil erosion (0.174 %). More than 94 % and 96.07 % of the population were engaged in agricultural activities and in livestock rearing respectively. Almost 11% of the people had job in government and private sectors and the same number of people had their business. About two percent of the people involved in driving occupation and the labor work each. Almost eight percent of Tamang ethnic group made liquor and sold it for Rs 600 per gallon to meet their daily needs and about one percent of the people sold the forest based products (e.g. utensils) for their supplementary income. The present scenario of the livelihoods of the local people showed that the conservation programs of the Shivapuri National Park had not changed the livelihood strategy of the people of Nayapati and Gagalphedi VDCs. However, the local people, as usual, were highly dependent on the forest resources for the collection of fodder, firewood, timber and bedding materials for the livestock. These activities of the locals had created a conflict between them and the park leading to the degradation of the forest and wildlife habitat loss.

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