ROLE OF COMMUNITY FOREST IN BIODIVERSITY CONSERVATION AND DEVELOPMENT: A CASE STUDY OF BAGHMARA BUFFERZONE COMMUNITY FOREST, CHITWAN, NEPAL



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 Tribhuwan University, Kirtipur kathmandu, Nepal

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2011

DECLARATION

I hereby declare that the work presented in this thesis has been done by 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 authors and institution.

.....

Date.....

Signature Candidate's name

LETTER OF RECOMMENDATION

This is to recommend that the thesis "ROLE OF COMMUNITY FOREST IN BIODIVERSITY CONSERVATION AND DEVELOPMENT" has been carried out by Sushila Khand for the partial fulfillment of Masters Degree of Science in Zoology with special paper Ecology. This is her 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.

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On the recommendation of supervisor "Dr. Ramesh Shrestha" this thesis submitted by **Sushila Khand** entiled "ROLE **OF COMMUNITY FOREST IN BIODIVERSITY CONSERVATION AND DEVELOPMENT**" is approved for the examination and submitted to the Tribhuwan University in partial fulfillment of the requirements for Master Degree of Science in Zoology with special paper Ecology.

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Sushila Khand

ABSTRACT

This study tried to analyze existing vegetation status, attitude of forest users groups towards biodiversity conservation and to assess the conservation of forest management practices in forest biodiversity conservation in Baghmara community forest adjacent to Chitwan National Park. Besides these, this study also assessed the participation status and explored the utilization and sharing of the forest products among FUG's members.

The study method included the available standard methods like questionnaire, survey, interview, direct observation group discussion etc. with biological and sociological aspects covered by households, questionnaire survey, informal and formal discussion with forest user groups and committee members and biological vegetation aspects covered from detailed forest inventory record in the community forest.

The perception and attitude of people are very positive towards biodiversity conservation. They desire diversified, well stocked and dense forest resources in their CF. major forest management practices were protection system, management and utilization of the forest and plantation activities. These practices were found to have an increasing effect on floral and faunal diversity in the CF. The other all impact of community forest seems very positive and encouraging. The study also considered the records of floral and faunal species and other woody vegetation as basic elements of forest biodiversity assessment. This community also involved in the development activities like construction of road, bridge toilet, school building, hospital building, and fisheries pond for rural people etc. Finally, the study shows that the people of Baghmara CF. have positive attitude towards biodiversity conservation.

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List of Abbreviations

CF - Community forest CFUG - Community forest user group CNP- Chitwan National Park DFO - District forest officer FUGs - Forest users groups ha- Hectare (1 ha.= 2.471 acres) HH - Household HMG - His majesty's government ICIMOD - International centre for international mountain development IUCN - International centre for international mountain development IUCN - International union for conservation of nature and natural resources NTNC- National Trust for Nature Conservation Sps - Species VDC- Village development community WWF- World Wildlife Fund for Nature

OPERATIONAL DEFINITION OF TERMS

The followings key terms are used the study benefits refer to any gain or forest products that people acquired from the community forest.

Community:

Refers to a group of households or people in a particular area with the common interest of securing a sustained supply of forest products and sharing all development activities.

Household (family) size:

Refers to the numbers of individuals sharing the same house, living together and eating together from one family s income.

Social status:

Refers to positive community perception result from involvement or membership in higher cast ethnicity higher education, sufficient property and membership in local social organizations.

Community forest management:

Refers to the forestry practices in which conservation protection development and utilization as done by a particular forest user group belong to a particular forest area which is legally handed over to them by DFO.

Forest products:

Refers to the following products which are contained or found or brought from forests, timber, poles, firewood, charcoal, fodder, grass, fruits, nuts flowers, herbal plants, soil, stone, sand etc.

Forest product distribution arrangement:

Refers to the allocation of the community forest products to users and arrangements of forest products for forest user groups.

Forest conservation:

Refers to the arrangements for forest protection as up hold by some community rules and regulations and enforced by punishment and penalties.

Benefit sharing:

Refers to the sharing of the benefits derived from community forest in terms of major or minor forest products and community facilities.

Equity:

Refers to the degree of benefit sharing in the forest user groups as reflected in the degree of involvement of the members in the development of community forestry .

Participation:

Refers to the households of a particular forest whose name is mentioned in the operation plan.

Forest user committee:

Refers to a group of people selected by the FUG who are responsible to the FUG for the implementation of the operation plan.

Forest user committee members:

Refers to the members of the executive committee who are responsible to the FUG for the implementation of the operation plan. The members include the chairman, vice chairman, secretary, associate secretary, treasures and other general members (as selected by FUG).