

**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  
Tribhuvan University, Kirtipur  
kathmandu, Nepal**

**Submitted by  
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**Sushila Khand**

**Central Department of Zoology  
Institute of Science and Technology  
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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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## LETTER OF APPROVAL

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

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This thesis work submitted by **Sushila Khand** entitled “**ROLE OF COMMUNITY FOREST IN BIODIVERSITY CONSERVATION AND DEVELOPMENT**” has been approved as a partial fulfillment for the requirements of Master’s 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.



## CONTENTS

<b>Topic</b>	<b>Page no.</b>
Declaration	i
Recommendation	ii
Letter of Approval	iii
Certificate of Approval	iv
Acknowledgement	v
<b>Contents</b>	<b>vi</b>
List of tables	ix
List of figures	ix
List of maps	x
List of abbreviations	x
Operational definition of terms	xi
Abstract	xiii
<b>1: INTRODUCTION</b>	<b>1-5</b>
1.1 Background Information	
1.1.1 Community forest	
1.2 Objectives	
1.2.1 General Objective	
1.2.2 Specific Objectives	
1.3 Rationale of the Study	
1.4 Limitation	
1.5 Significance	<b>2:</b>
<b>LITERATURE REVIEW</b>	<b>6-11</b>
<b>3: MATERIALS AND METHODS</b>	<b>12-17</b>
3.1 Selection of the study area	
3.2 Source of data	
3.2.1 Secondary data	
3.2.2 Primary data	

3.2.2.1 House hold survey

3.2.2.2 Questionnaire survey

3.2.2.3 Key informants survey

3.3 Study area

3.3.1. Description of the study area

3.3.2. Seasons

3.3.3. Biodiversity

#### **4: RESULTS**

**18-22**

4.1 CFUGs Characteristics/ Socioeconomic condition

4.1.1 Ethnic composition of the respondents

4.1.2 Age composition of the respondents

4.1.3 Occupation status of sampled household

4.1.4 Land holding characteristic of sampled household

4.1.5 Educational status of respondents

4.1.6 Livestock status of the respondents

4.1.7 Feeding system

#### **5: DISCUSSION**

**23-35**

5.1 Management practices and differences of the  
FUG on biodiversity

5.1.1 Protection system

5.1.2 Plantation activity

5.1.3 Forest management practices and utilization of the products

5.2 Consequence of FUG management practices with respect of  
Biodiversity

5.2.1 Comparative study of floral and faunal

Species in community forest

5.2.2 Problems in biodiversity conservation

5.2.3 Peoples participation in management practices

And attitude of the FUG towards biodiversity conservation

5.2.3.1 Peoples view on management practices

5.2.3.2 Status of technical understanding of FUG

Towards management practices

5.2.3.3 Peoples knowledge on biodiversity

5.2.3.4 Participation in management practices and

## Different activities

### 5.2.4 Attitude towards biodiversity conservation

#### 5.2.4.1 Attitude of the respondents on positive Statement

#### 5.2.4.2 Attitude of the respondents on negative Statement

### 5.2.5 Utilization and sharing of forest products

### 5.2.6 Perception of users to management practices for Biodiversity conservation

## **6: CONCLUSION AND RECOMMENDATIONS 36-37**

### 6.1 Conclusion

### 6.2 Recommendations

## **7: REFERENCES 38-41**

## **APPENDICES 42-57**

Appendix I : Common plants and animals species found in study area 42-49

Appendix II : Questionnaire used for collection of information 50-56

Appendix III : Checklist used for the focused group discussion 57

Appendix IV : Photo plates of CF to the study area 58

## LIST OF TABLES

<b>Table no.</b>	<b>Title of table</b>	<b>Page no.</b>
Table 1	Framework for analysis	13
Table 2.	Name of the members of the executive committee and their post	15
Table 3.	Ethnic composition of the sampled household	19
Table 4.	Age composition of the respondents	20
Table 5.	Occupation status of the sampled household	20
Table 6.	Livestock population of the sampled household	22
Table 7.	Livestock feeding system of sampled household	22
Table 8.	Technical understanding of sampled household	27
Table 9.	Attitude of the respondents on positive statements	30
Table 10.	Attitude of the respondents on negative statements	31
Table 11.	Name of species of forest products	32
Table 12.	Recommended forest products & amount	33
Table 13.	Activities offered by visitors	34

## **LIST OF FIGURES**

<b>Figure no.</b>	<b>Title of figures</b>	<b>Page no.</b>
Figure 1.	Land holding characteristics of sampled household	21
Figure 2.	Educational status of the respondents	21
Figure 3.	Reasons for not participate in CF management practice	28
Figure 4.	Percentage of people participation	29

## LIST OF MAPS

<b>Maps No.</b>	<b>Title of Maps</b>	<b>Page no.</b>
Map 1.	Map of study area	16
Map 2.	Map of chitwan district	17
Map 3.	Map of Nepal showing chitwan district	17

## **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 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 following 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 upheld 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, treasurers and other general members (as selected by FUG).