

SANDEE Working Paper Questionnaire No. 1- 03

Title of the Paper: 'Property Rights and Natural Resources: Socio-Economic Heterogeneity and Distributional Implications of Common Property Resource Management', by Bhim Adhikari, SANDEE Working Paper No. 1- 03

Abstract: Poverty, property rights and distributional implications of community-based resource management have become major topics of discussion and debate in recent years. This study tries to examine the contribution of community forestry to household-level income with particular emphasis on group heterogeneity and equity in benefit distribution. The assessment of household level benefits suggests that poorer households are currently benefiting less in absolute terms from community forestry than less poor households. In terms of the contribution of forests to household income, the study results suggest that the poor are not necessarily more dependent than the rich, a finding that contradicts results from other similar studies. Econometric analysis suggests that income from community forests is related to socio-economic attributes and private resource endowments of households. Households with land and livestock assets, as well as upper caste households gain more from the commons, while better educated households depend less on forest resources. Female-headed households benefit less from community forests, further aggravating the inequity in distribution of benefits. The study makes a number of recommendations to improve community forest management in Nepal, which include, due consideration for community needs in selecting species for community forestry, transferability of user rights, which would allow less endowed households to benefit more, and more and equitable representation of women and disadvantaged groups in forest management committees. (JEL Q2, Q23).

Date of Survey: 24/09/02 – 14/12/ 02

Place of Survey: Seven Villages and one Municipality (Village) in two districts of Bagmati Zone, Nepal. The following villages were included:

Kavrepalanchowk District

1. Urga Tara Village Development Committee (VDC)
2. Panauti Municipality
3. Mahadavsthan VDC
4. Panchkhel VDC

Sindhupalchowk District

1. Pipal Danda VDC
2. Thulo Sirubari VDC
3. Pangretar VDC
4. Sanga Chowk VDC

Type of Survey: Rural Household with one Municipality (Rural)

Number of Respondents: 309

Language Translated to: Nepali

Sponsored by: South Asian Network for Development and Environmental Economics (SANDEE)

APPENDIX A

(Research Project funded by the South Asian Network for Development and Environmental Economics,(SANDEE), Nepal)

Principal Investigator: Bhim Adhikari
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Questionnaire for FUG Executive Committee Members

Name of Community Forest:

Number of User household:

Date of FUG Formation:

Date of Handover:

Area:

1. What are the income generating (IG) activities in community forest?

S.N.	IG Activities	Area	Beneficiary Households

2. What are the income sources for Forest User Group?

S.N.	Income Source	Remarks

3. What commodities are being extracted for commercial purpose so far?

S.N.	Commodity	Unit	Quantity	Total income (Rs.)

Q 3i How does FUG investing the surplus fund for various community development activities?

S. No	Investment	No. of Beneficiary Households	Remarks
1	Drinking water		
2	Irrigation scheme		
3	School		
4	Temple		
5	Health post		
6	Rural Access Road (Foot Path)		
7	Community House		
8	Others		

4. When FUG members gather for meeting?

Once a month Once a two months As and when required

5. When the meeting of executive committee held?

Once a month Twice a month As and when required

6. What is the percentage of user household who attend last 4 meetings?

7. What is the parentage of user committee members who attended last 4 meetings?

8. How do you evaluate the institutional performance of Forest User Group? (1= Least satisfactory and 5= Highly satisfactory)

S.N.	Name of Committee members	Rating				
		1	2	3	4	5

9. Does income generating and other activities undertaken by your group has been emulated in neighbouring areas?

Yes

No

10. What is the composition of Forest User Group Executive Committee in terms of gender?

Number of female

Number of male

11. How user groups were formed?

Initiative from Forest Department Community's own initiative

12. How decision of executive committee is made?

Consensus

Majority

13. What is your suggestion regarding institutional development and distribution system of community forestry program?

APPENDIX B

Questionnaire for the Household Survey

Researcher: Bhim Adhikari

Interviewer:

Date of Interview:

Village/Ward

Household Head Name:

Age..... Caste.....

A. Demographic Information

Q. 1a. Please read out and fill the following household information

S. No	HH Members	Age (year)	Sex (M/F)	Education (number of school years)	Occupation (code)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Occupation:

Agriculture = 1

Business = 2

Public Service = 3

Private Service = 4

Cottage Industry = 5

Agriculture + Business = 6

Agriculture + Service = 7

Wage Labour = 8

Other = 10 (Please Specify...)

Q. 2a. Has any members of your family has been out of home for more than three months?

() Yes: Go to Q. 3a

() No: Go to Q. 1b

Q. 3a Where and on what occupation they are working?

S.NO	HH member	Age	Sex (M/F)	Occupation	Place of Work
1					
2					
3					
4					
5					

B. Land Holding, Tenure and Production Systems

Q 1b. Please read out and fill the following landholding and tenure information

Land Characteristics	Land Type and Area (Ropani)		
	Own land	Shared crop in	Shared crop out
Irrigated Land			
Unirrigated Land			
Private land			
Others			

Q. 2b Which of the following assets does your household own?

S. No.	Asset	Access		
		Own	Hire	Borrow
1	Building/houses			
2	Agriculture tools			
3	Plough			
4	TV/radio			
5				
6				
7				

Q. 3b. What are the major crops you have produced in the past year and annual income from selling agriculture products?

S.N.	Unit	Total Production	Unit Sold	Unit Price (Rs.)	Total Income (Rs)
	Rice				
	Maize				
	Millet				
	Wheat				
	Legumes				
	Mustard				
	Barley				
	Fruits				
	Potatoes				
	Vegatables				
	Others				

Q. 3b Which of the following livestock does your household own (now and before implementing the community forestry program)?

S. No.	Livestock species	Number of livestock	
		Before CF	Now
1	Cattle		
2	Buffalo		
3	Goat		
4	Sheep		
5	Pig		
6	Rabbits		
7	Chicken		
8	Others		

Q. 4b What are the benefits of livestock?

S.No	Benefits	Please tick
1	Draught power	
2	Source of cash income	
3	Milk	
4	Meat	
5	Wool	
6	Others (please specify)	

Q. 5b. Please mention the annual income from sale of following livestock products?

Product	Unit	Total Production	Unit Sold	Unit Price (Rs.)	Total income (Rs.)
Milk					
Meat					
Egg					
Wool					
Others					

Q 6b. What was the income from the sale of live animals last year?

Livestock	Unit	Unit sold	Unit Price (Rs.)	Total income (Rs)
Cattle				
Buffalo				
Goat/sheep				
Pig				
Chicken				
Others				

Q. 7b How long the field crop production can meet your household food demand?

() < 3 months () 3 to 6 months () 6 to 9 months () 9 to 12 months () > than 12 months

Q. 8b What are the number of fodder/fuel wood trees in your private land now and before implementing the community forestry program?

S. No	Species	Before CF	Now
1			
2			
3			
4			
5			
6			
7			
8			

C. Off-farm Production System

Q 1c. Besides crop and livestock income, what are other sources of household income?

Sources	No. HH member involved		Annual Income (Rs.)	
	Men	Women	Men	Women
Business				
Service				
Cottage industry				
Wage labour				
Remittance				
Pension				
Others				

Q. 2c Does your family members involved in marketing of following products from private forest?

Products	Unit	Sale Quantity/year	No. HH members involved		Annual Income (Rs.)	
			Men	Women	Men	Women
Fodder						
Fuel wood						
Herbs/medicine						
Fruits/Nuts						
Thatch grass						
Other products						

D. Natural Resource Management and Utilization

Q. 1d What is your annual consumption of following forest products now and before the implementation of community forestry?

S. No	Products	Unit	Annual Consumption	
			Before CF	Now
1	Fuel wood			
2	Tree fodder			
3	Timber			
4	Leaf litter			
5	Grasses			
6	Thatching grass			
7	Fruits/Nuts			
8	Herbal medicine			
9	Others			

Q. 2d What are the quantities of forest products available for your household annually from community forest and what amount from your own private forest?

Product	Unit	Before CF	Now*			Private Forest
			CF1	CF2	CF3	
Firewood						
Tree fodder						
Timber						
Leaf litter						
Thatching grass						
Fruits/nuts						
Herbal medicine						
Grasses						
Others						

* CF1 = Community forestry 1, CF2 = Community forestry 2, CF3 = Community forestry 3 (In case, household deserve the membership of more than one forest user group)

Q. 3d Where and how many times do you take your livestock for grazing?

Grazing Area	Livestock Head	Season and Frequency				Grazing Time
		Summer	Winter	Monsoon	Spring	
Community Forest						
National Forest						
Grazing Area						
Private land						
Fallow Land						
Others						

Q. 4d How forest products are distributed?

() Family size/equity () Equality

Q. 5d. Are you satisfied with existing distribution process?

() Yes () No

E. Resource Harvesting/Utilization Costs

Q. 1e How much time do you spend in collecting a unit of following forest product?

S.N.	Forest Products	Unit	Collection Time			Remarks
			Men	Women	Children	
1	Firewood					
2	Tree fodder					
3	Timber					
4	Leaf litter					
5	Thatching grass					
6	Ground grasses					
7	Herbal medicine					
8	Fruits/nuts					
9	Others					

Q. 2e. How much time do you have to spend in travelling to and from your house in collecting following forest product?

S.N.	Forest products	Unit	Time	Responsible Person		
				Men	Women	Children
	Firewood					
	Tree fodder					
	Timber					
	Leaf litter					
	Thatching grass					
	Fruits					
	Herbal medicine					
	Grasses					
	Others					

Q. 3e How much do you have to pay (fees) for harvesting a unit of following commodities from the community forestry?

S.N.	Forest Products	Unit	Unit Price (Rs.)	Remarks
1	Firewood			
2	Tree fodder			
3	Timber			
4	Leaf litter			
5	Thatching grass			
6	Fruits			
7	Herbal medicine			
8	Grasses			
9	Others			

Q. 4e How much time you need to spend annually in following FUG obligatory activities?

S. N.	FUG Activities	Time Spent (Days)	Remarks
1	CF Protection (watching, monitoring etc.)		
2	Plantation		
3	Weeding		
4.	Thinning and pruning		
5.	Meetings		
6.	Communication		
7.	Travelling		

5e. Is there any direct cash incur to your household annually for communicating, information gathering and travelling for community forestry related activities? If yes, what is the tentative direct cash expenses (Rs.)

6e. What amount (User Group membership fee) you have to pay annually as a member of Forest User Group?

(Rs.) Pay () Do not need to pay

7e. Do you hire any paid labour beside your family members in collecting or processing of those forest products from community forest? () Number

8e. What is the hired labour rate per day? ()

9e. What is the distance between your home and community forest? () km

10e. How long do you have to travel to and from the community forest for animal grazing?

() Minutes () Hours

Q. 11e Who in your family grazed? () Men () Women () Children

Q. 12e What are the tools you owned that used in forestry operation and their costs and economic life?

S.No.	Type of Tools	Cost (Rs.)	Economic Life (Years)	% Use	
				Forestry	Non-Forestry
1	Axe				
2	Sickle				
3	Doko				
4	Namlo				
5	Rope				
6	Saw				
7	Khurpa				
8	Others				

F. Household Awareness/Participation/Policy issues in CPR Management

Q. 1f. When was the forest user group and executive committee formed? (BS 20.....)

Q. 2f. When was the community forestry handed over to the community (BS.....)

Q. 3f. Do you participate in users annual/monthly assembly?

Yes No

Q. 4f Are any women members from your household represented in users committee?

yes No

Q. 5f How do you evaluate the performance of users committee?

Highly satisfactory Satisfactory Neutral Not satisfied

Q. 6f. At what stage do you and your family members participate in organization activities?

Planning and decision-making Implementation benefit sharing Evaluation

Q. 7f. How do you evaluate the rate of your and family members participation in FUG activities?

Strong participation Occasional participation Not very often Hardly ever

Q. 8f. How do you know when to collect various forest products?

Attending committee meeting Informed by committee members

Informed by neighbours FUG assembly

Q. 9f. What are the advantages and disadvantages of membership of the Forest Users Group?

S. No	Advantages of Membership	Disadvantages of Membership
1		
2		
3		
4		
5		

Q. 10f. What is your perception regarding equity issue in community forestry?

Equity Issues	Y/N	How?
Are you relatively satisfied with existing institutional arrangements?		
Have you even been disadvantaged by institutional arrangements?		
Is allocation of membership rights in organization fair?		
Has distribution of resources and wealth change?		
Are costs and benefits of resource management based on individual's ability to pay?		
Others (please specify)		

G. Natural Resource Quality and Management

Q. 1g According to your idea, what is changing trend of the following indicators in the last 10 years?

Indicators	Trend			Remarks
	Increasing	Constant	Decreasing	
Crop production				
Area under forest				
Area under pasture				
Tree species				
Number of water spring				
Time to collect fuel, fodder and leaf litter				
Tree on private land				
Flooding/landslides				
CF related employment opportunity				
Time to fetch water				

Q. 2g. In your opinion, what were the likely effects of institutional change i.e. from state management to community-based management in local livelihoods?

Impacts	Strongly Agree	Agree	Disagree	Strongly Disagree
Increase equal access to resource base				
Threat alternative livelihood				
Unnecessary restriction				
Excessive collection charge				
Help reduce poverty				
Able to meet the household demand				
Decrease access to CF				

H. Miscellaneous

Q. 1h Are you or your family members are associated/participated in any village level development organization? () Yes () No

Q. 2h If yes, please provide following information?

S. No	Name of Organization	Type*	Nature of work**	Number involved		Position held	Remarks
				Female	Male		
1							
2							
3							
4							

* Local informal = 1 Local formal = 2 Government = 3 NGO = 4 INGO = 5
 ** Saving and credit = 1 Conservation = 2 Agriculture/livestock production = 3
 Women's organization = 4, Village cooperative = 5 Others = 6 (specify)

Q. 3h Do you need credit for your livelihood activities? () Yes () No

Q. 4h If yes, where do you go for credit?

() Bank () Land lord () Neighbour () Relatives () Co-operatives
 () others (please specify)

Q 5h How does FUG investing the surplus fund for various community development activities?

S. No	Investment	Are you benefited from this investment		If no, give the reason
		Yes	No	
1	Drinking water			
2	Rural road			
3	Irrigation scheme			
4	Temple			
5	School			
6	Health post			
7	Community House			
8	Others			

Q. 6h. What is the trend in employment opportunities in the past 10 years in your area?

S.No	Nature of Employment	Increasing	Decreasing
1	Forest-based opportunities		
2	Agriculture-based opportunities		
3	Cottage industry based opportunities		
4	Government		
5	Non-government		
6	Private sector		
7	Others		

Q 7h. Do you have any suggestions regarding the improvement of existing situation especially equity aspects of community forestry? How community forestry will be more profitable and sustainable?