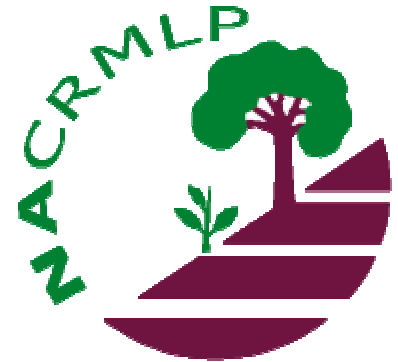


NEPAL AUSTRALIA COMMUNITY  
RESOURCE MANAGEMENT AND  
LIVELIHOODS PROJECT

Guidelines for Non-Timber Forest Products  
(NTFPs) Screening Survey



*Prepared for*

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2 May 2006

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## Acronyms

CFUG	Community Forest User Group
NTFP	Non-Timber Forest Product
OP	Operation Plan
PRA	Participatory Rural Appraisal
PRM	Participatory Resource Mapping

## Summary

These guidelines were prepared for preliminary screening surveys of non-timber forest products (NTFPs). They show how to collect the data needed to prioritise potential NTFP species and to identify those which merit further survey and management prescriptions. These guidelines also help to identify the existing NTFP management activities of community forest user group (CFUGs) during their operational plan (OP) preparation and revision.

The guidelines are intended for use by local NTFP inventory facilitators, who will use it as reference during OP preparation for CFUGs. The methodologies employed include ethno-botanical survey and participatory resource mapping (PRM).

# 1 Introduction

A screening survey is a useful pre-feasibility study tool. It can be used to determine whether or not NTFP-based enterprises are likely to be viable in a particular location and if they are, which enterprises are likely to be viable where. The data collected can be used to prioritise subsequent developments of NTFP species and will answer questions about what CFUGs have done in the past.

This survey is performed by a CFUG as it prepares its OP. After the screening survey, an inventory, or quantitative and qualitative assessment of NTFPs will be carried out.

# 2 Rationale

A screening survey enables CFUGs to identify which NTFPs merit further study. Using participatory rural appraisal (PRA) tools employed in the field itself, an OP preparation facilitator can collect basic information about the status, strengths and weaknesses of a variety of NTFPs. It helps to determine what needs to be done in the future to ensure the sustainable management of potential NTFP species. Moreover, it helps to identify the existing NTFP management activities of community forest user groups (CFUGs) during their operational plan (OP) preparation and revision.

# 3 Objectives

- To collect basic information about NTFPs from key informants for inclusion in a CFUG's OP.
- To provide enough data that NTFP species can be prioritised for future inventory.

# 4 Users

Local OP facilitators will use this guideline as a tool for collecting information needed to prepare an OP for NTFP management in a community forest.

# 5 Materials and Method

Three major steps are performed while conducting a screening survey:

1. Team coordination
2. Orientation
3. Survey

## **5.1 Team Coordination**

Two local NTFP facilitators, a ranger and four to ten key informants, from each CFUG will work in coordination as a CFUG network or cluster.

## **5.2 Orientation**

An orientation to the guideline for conducting a screening survey will be managed by the facilitator. The concerned ranger will be involved during orientation.

### **5.2.1 Materials Required**

- Map of community forest
- Data sheets and recording documents
- Altimeter

### **5.2.2 Timeframe**

A CFUG can complete a screening survey in one day.

## **5.3 Survey**

Conducting the survey involves two steps: a participatory ethno-botanical survey using a PRA questionnaire and participatory NTFP resource mapping.

### **5.3.1 Ethno-botanical Survey**

By conducting an ethno-botanical survey the team can collect local traditional knowledge about NTFPs and their uses of which the existing market may be unaware. It will demonstrate the total number of NTFPs in the community forest (CF) which the community used. A prepared checklist and questionnaire will facilitate the process. (See Annex 1)

#### ***Questionnaire***

Before the questionnaire is widely distributed, it should be tested in sample area to see if it solicits the required information. If the trial goes well, the questionnaire can be recommended for data collection. NTFP collectors and users should be targeted to answer the questionnaire.

#### ***Objectives***

- To collect traditional knowledge about potential NTFP species
- To discover the extent of NTFP resource mobilisation by a CFUG

### **5.3.2 Participatory NTFP Resource Mapping**

Participatory NTFP resource mapping will be done to assess resource area coverage and site reconnaissance for further study regarding potentiality, biomass and ecology. Mapping provides a basic spatial picture of the NTFPs found in a community forest.

### ***Objectives***

- To identify where potential NTFP species are found on a map of a community forest.
- To estimate the total potential area for the production of identified NTFP species in hectares.

### ***Steps***

- Group interaction and orientation - one interaction session should be conducted in each CFUG to discuss the status, importance and proper utilisation of NTFPs. CFUG members should be oriented to NTFP resource mapping and their questions should be answered.
- Selection of key informants - an active group including NTFPs collectors and users should be selected by the CFUG itself to conduct resource mapping. NTFP facilitators will support this endeavour.
- Team formation - with selected key informants, a working team for NTFP resource mapping should be formed. Key informants may not know about the blocks and boundary of the community forest or not be able to read local sites on forest maps. If this is the case, additional reference persons should be involved.
- Participatory mapping - after a responsible team has been formed, PRM can start. NTFP facilitators oversee the working team.

### ***Participatory Mapping Procedure***

Discussion regarding the objectives should be conducted with participants. At the most 10 potential NTFP species areas will be delineated in different blocks on a map of the community forest. If possible, resource condition (good, fair or poor) should also be included. The area of each delineated block is then estimated in a suitable unit of area according to information provided by the participants. This procedure is repeated with another group of key informants and the results cross-checked.

The accuracy of the resource map will be tested by direct field observations in the forest during a future detailed survey of NTFPs. The corrected resource map will be used for qualitative and quantitative resource assessment. Thus, before enterprise development actually proceeds, a more accurate resource map will be generated.

- Tally of information - in order to increase its validity, the information collected should be tallied with knowledge provided by another small group from the same CFUG .
- Site observation for accuracy - in order to increase the accuracy of the PRM exercise the site will be observed in the detailed study.

## **6 Expected Outputs**

### **6.1 Basis for OP Preparation**

- Basic information needed to prioritise NTFP species will be collected.
- Basis for NTFP management provisions for OP preparation and revision.

### **6.2 Basis for Scientific Identification (botanical name)**

Once local names and plant uses are collected by a screening survey, this information can be used as a basis for proceeding toward scientific identification.

### **6.3 Basis for Determining Inventory Requirements**

A list of potential NTFP species will be determined by the screening survey and then prioritised for the qualitative and quantitative assessment for starting enterprise development (see Annexes 2 and 3).

## **Annex 1**

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### **Checklist of NTFP Information**



## 2. Data collection sheet for resource mobilisation of NTFPs

(Administer to collectors, CFUG chairman and members)

District:                      Locality:                      VDC/Ward no.                      Name of CFUG:

Altitudinal Range:                      Community:                      Name of Informant:                      Date:

SN	Name of NTFP species		Frequency of collection (%)			Time of collection for sale (month)		Harvesting interval (no. of months /years)
	Botanical name	Local name	High (>50)	Moderate (10 to 50)	Low (<10)	Winter	Summer	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

### 3. Data collection sheet for resource availability, income generation and trade

(Administer to forest guards, collectors, traders and CFUG chairman and members)

Date: District: VDC/Ward no.: Range post:

Surveyor: Number of participants: Male/Female:

Name of CFUG: Name of informant: Age: Occupation:

#### A. Number of species found in the community forest and annual collection quantity

NTF Ps	Tentative NTFP area coverage in different blocks (B) of a community forest (ha. <i>/ropani</i> )												Weight of annual collection in CF (Kg/dharni)
	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12	
1.													
2.													
3.													
4.													
5.													
6.													
7.													
8.													
9.													
10.													

#### B. Past statement of NTFP collection and sale (Fill this table in only if applicable).

NTFPs	Commencement year of collection (5/10/15 yrs ago)	Trend of collection within 10 years of trade (collection quantity in Kg or tonne)											
		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005		
1.													
2.													
3.													
4.													
5.													
6.													
7.													

C. Trading channel of NTFPs (Fill in this table only if applicable).

Trading system (√)	Trading centre	Charge or tax per kg or tonne		Advance money received by collectors from local contractors
		CFUG	HMG	
1. Individual (.....)				
2. Local contractor (.....)				
3. Through network (.....)				
4. Group trading (.....)				

D. Number of households (HHs) involved in NTFP collection. (Fill in this table only if applicable).

No. of households (HHs) involved in NTFP collection						Total DAG HHs	Remarks
No. of ethnic group HHs		No. of Dalit HHs		No. of other DAG HHs			
Male	Female	Male	Female	Male	Female		

E. Annual income from NTFP collection and its contribution to the food security of collectors. (Fill in this table only if applicable)

Name of collector	Family members	Annual income earned from NTFPs	Income from NTFPs as a % of total annual income	Sources of other income	Food secured from NTFPs (days/months)

**4. Questionnaires for data collection about livelihoods and management**

(Administer to CFUG chairman and members)

1. What sort of people are counted as poor or disadvantage groups in your community? (Tick (√) only if applicable and specify the number of persons)

For example:

- a. Illiterate Dalits with houses and a small landholding but no development skills
- b. (Number =.....).
- c. Illiterate Dalits with houses but no other property
- d. (Number =.....).
- e. Illiterate dalits without houses and dependent on NTFPs for subsistence
- f. (Number =.....).

- g. Illiterate non-Dalits without houses and dependent on NTFPs for subsistence
- h. (Number =.....).
- i. None

*(The above statements may not be relevant for every CFUG. Appropriate descriptions should be established and numbers of people ascertained.)*

2. What sort of role has been played by NTFPs in livelihood improvements for the poor of your community? (Tick (√) only if applicable)
  - a. Subsistence (.....) b. Infrastructure development (.....) c. Livestock farming (.....)
  - d. Education (.....) e. Food security (.....). f. If any other, specify.
3. Are any activities carried out on the private land in your CFUGs in order to promote NTFPs?  
If yes, what sort of people initiate activities and are poor groups involved in these activities?  
If yes, how many?
4. Are policies and strategies for the livelihood improvement of poor people included in the annual plans of your CFUG? If yes, what are they? If no, do you want to include such policies? If yes, how would you go about it?
5. Have you initiated any activities for sustainable NTFP conservation? If yes, what are they?

## **Annex 2**

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# **Interpretation of Results**

## Annex 2: Interpretation of Results

### A. Result sheet

SN	Prioritised species (Local name)	Total coverage in the CF (area in ha, km <sup>2</sup> or <i>ropani</i> )	Tentative annual supply (in kg or tonnes)	Blocks with resource potential (indicate identify number)	Indicated sites

### B. Result sheet

SN	Mode of use	Total no. of plant species	No of plant species in trade value	No. of species collected for trade
1	Medicine			
2	Incense			
3	Dye			
4	Fibre			
5	Edible fruit			
6	Vegetable			
7	Others			
8				

### C. Result sheet

SN	Portion used	Total no. of plant species	Total no. of plant species collected			Total no. of plant species by collection frequency		
			Winter	Summer	Interval	High (>50%)	Moderate (10%to50%)	Low (<10%)
1	Whole plant							
2	Root							
3	Rhizome							
4	Stem							
5	Bark							
6	Leaf							
7	Flower							
8	Fruit							
9	Seed							
10	Other							

### D. Result sheet

SN	Name of collector	Dependency on NTFPs for subsistence		No. of collectors
		Partial	Full	
1				
2				
3				
4				
5				

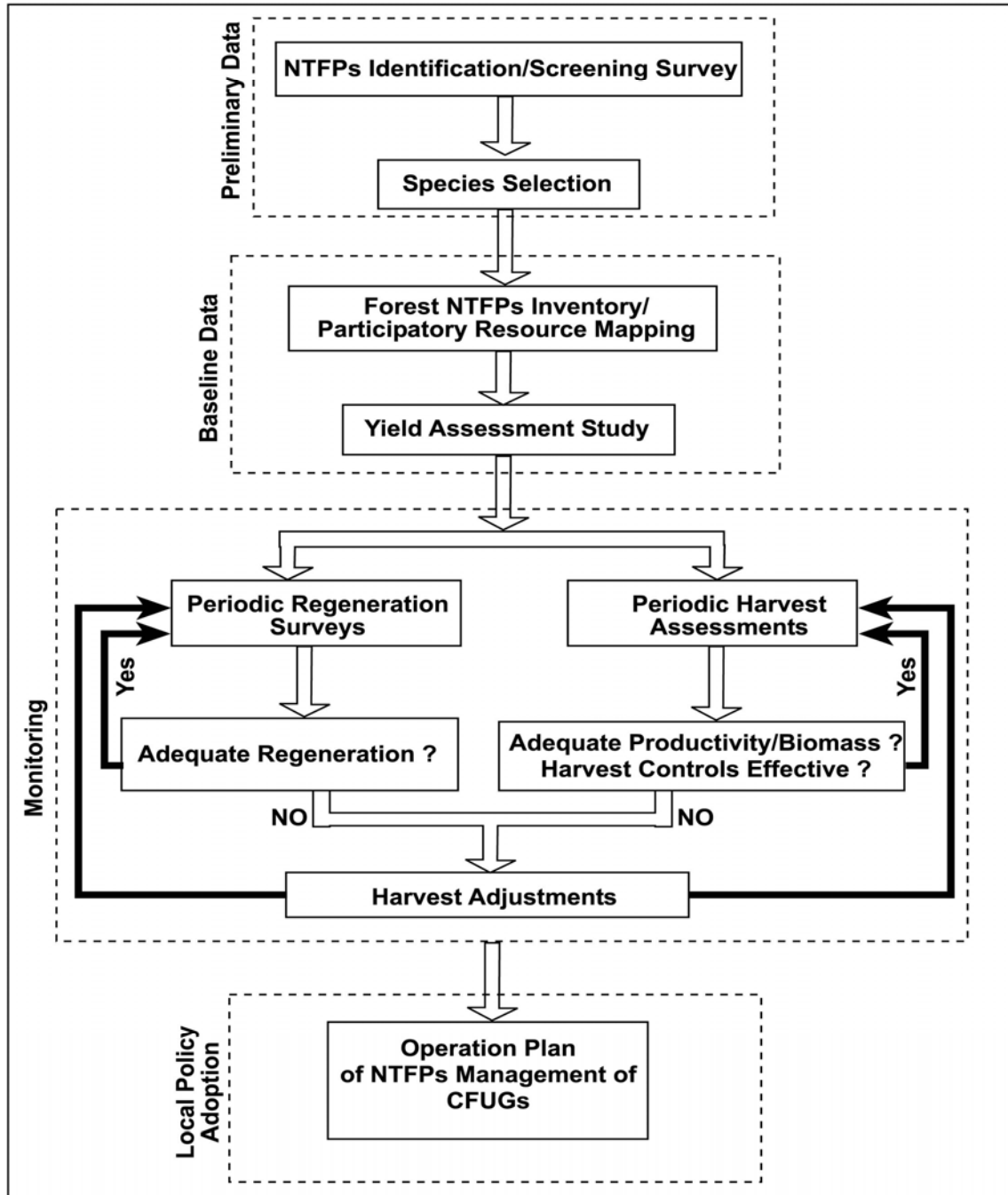
## **Annex 3**

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# **Screening Survey in NTFPs Management System**

### Annex 3: Screening Survey in NTFPs Management System

## Sustainability System for NTFPs Management



Reference: Peter, 1994

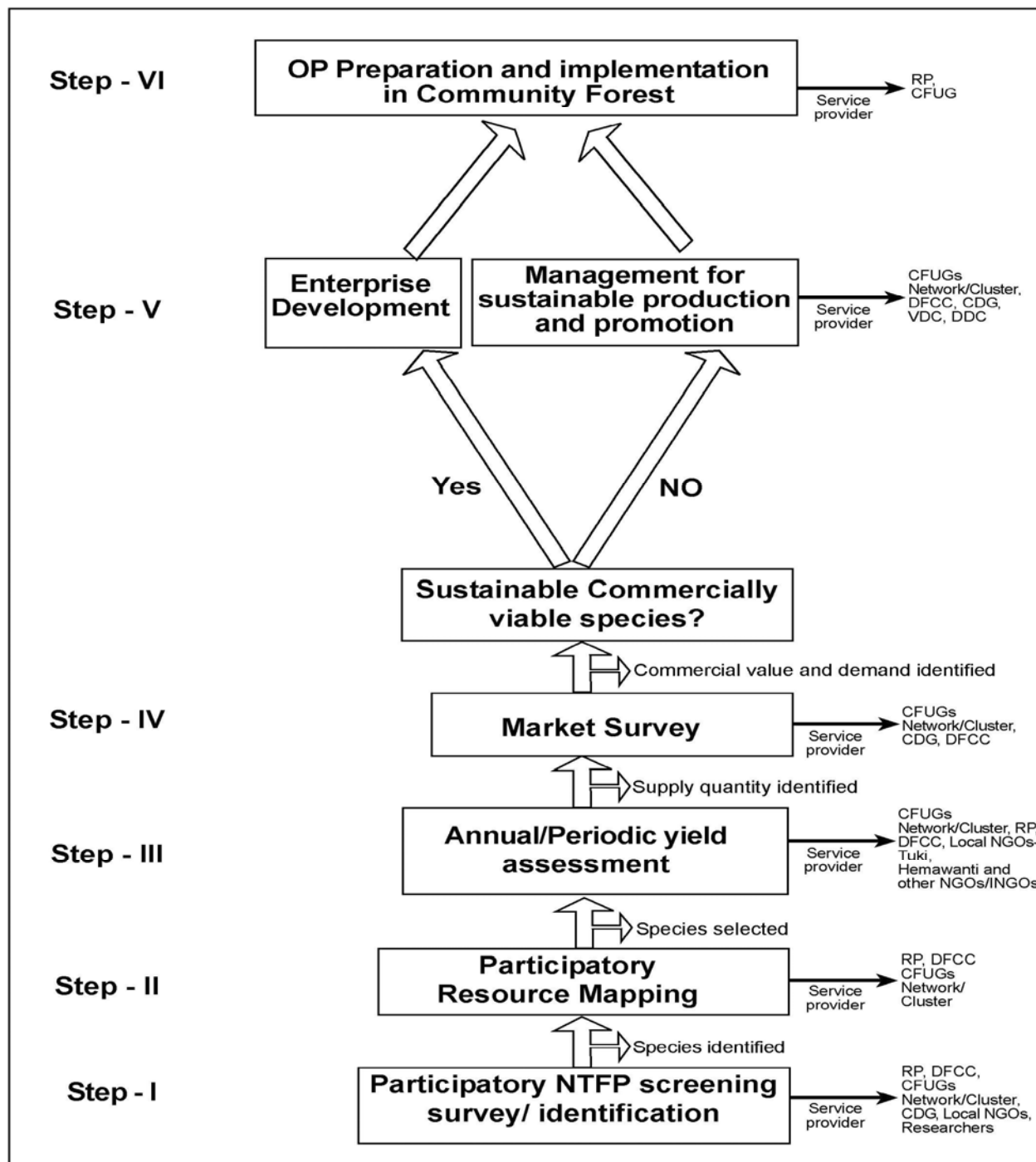
**Annex 4**

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**Screening Survey in Steps of Enterprise  
Initiation**

## Annex 4: Screening Survey in Steps of Enterprise Initiation

# Steps for initiation of enterprise



Note: RP = Rangepost, CFUG = Community Forest User Group, CDG = Community Development Group, VDC = Village Development Committee, DDC = District Development Committee, DFCC = District Forest Coordination Committee, NGO = Non Governmental Organization, INGO = International Non Governmental Organization

## **Annex 5**

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### **References**

## Annex 5: References

- Achet and Shukla. 1998. "Situational Analysis of Banke and Berdia Districts: A Forest Enterprise Development Perspective." Submitted to Ban Udyam–BSP/New Era, EFEA Project.
- Balami, N.P. March 2004. "Ecological Status and Their Occurrence with Forest Types of Some Important NTFP Plants of Upper Slope Areas (2000-3000 m) of Tatopani and Listi VDCs, Sindhupalchowk District, Central Nepal." A research report submitted to Nepal-Australia Community Resource Management and Livelihoods Project, Lalitpur, Nepal, p.43.
- Balami, N.P. 2004. "Ecological Status and Their Occurrence with Forest Types of Some Important NTFP Plants of Dandapakhar Area (1800-2600 m) of Atterpur, Jethal and Thulopakhar VDCs, Sindhupalchowk District." A report submitted to Nepal Australia Community Resource Management and Livelihoods Project, Nepal.
- Balami, N.P. 2005. "Participatory NTFP Resource Mapping in Nine CFs and Inventory of *Dhasingare* (Harvestable Stock), *Lokta* and *Argeli* (Growing sStock) in Bolde Kharka CF of Dandapakhar, Thulopakhar, Attarpur, Jethal and Linsankhu VDCs, Sindhupalchowk District, Nepal." A report submitted to Nepal Australia Community Resource Management and Livelihoods Project, Nepal.
- Balami, N.P. 2005. "Participatory NTFP Resource Mapping and Inventory of Allo (Harvestable Stock) and *Lokta* (Growing Stock) in Tasithang and Dugunagadi Dhaisingdanda Community Forest of Tatopani VDC, Sindhupalchowk District, Nepal." A report submitted to Nepal Australia Community Resource Management and Livelihoods Project, Nepal.
- Greig-Smith, P. 1969. *Quantitative Plant Ecology* (2<sup>nd</sup> ed.). Bitterworth, London.
- Jha, P.K. 1997. "Environment, Plant Resources and Quantitative Estimation Methods for Vegetation Analysis." In Shrestha, K.K., *et al.* (eds.), *Ethnobotany for Conservation and Community Development, Proceeding of the National Training Workshop in Nepal*, Jan. 6-13, 1997, pp. 42-57.
- Martin, G.J. 1995. *Ethnobotany: A 'People and Plants' Conservation Manual*. Chapman and Hall, London-Weinheim.

Nepal B.K. and P. Sapkota. 2001. "Inventory and Resource Assessment of Non-Timber Forest Products at Mimi, Melchham and Darma VDCs Humla District, Nepal." Submitted to ANSAB, Nepal.

NSCFP. 2001. "Participatory Inventory Guidelines for Non-Timber Forest Products." Nepal Swiss Community Forestry Project, Swiss Agency for Development and Cooperation.

Peters, C.M. 1994. *Sustainable Harvest of Non-Timber Plant Resources in Tropical Moist Forest: An Ecological Primer. Biodiversity Support Program.* Institute of Economic Botany, the New York Botanical Garden Bronx, New York 10458

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