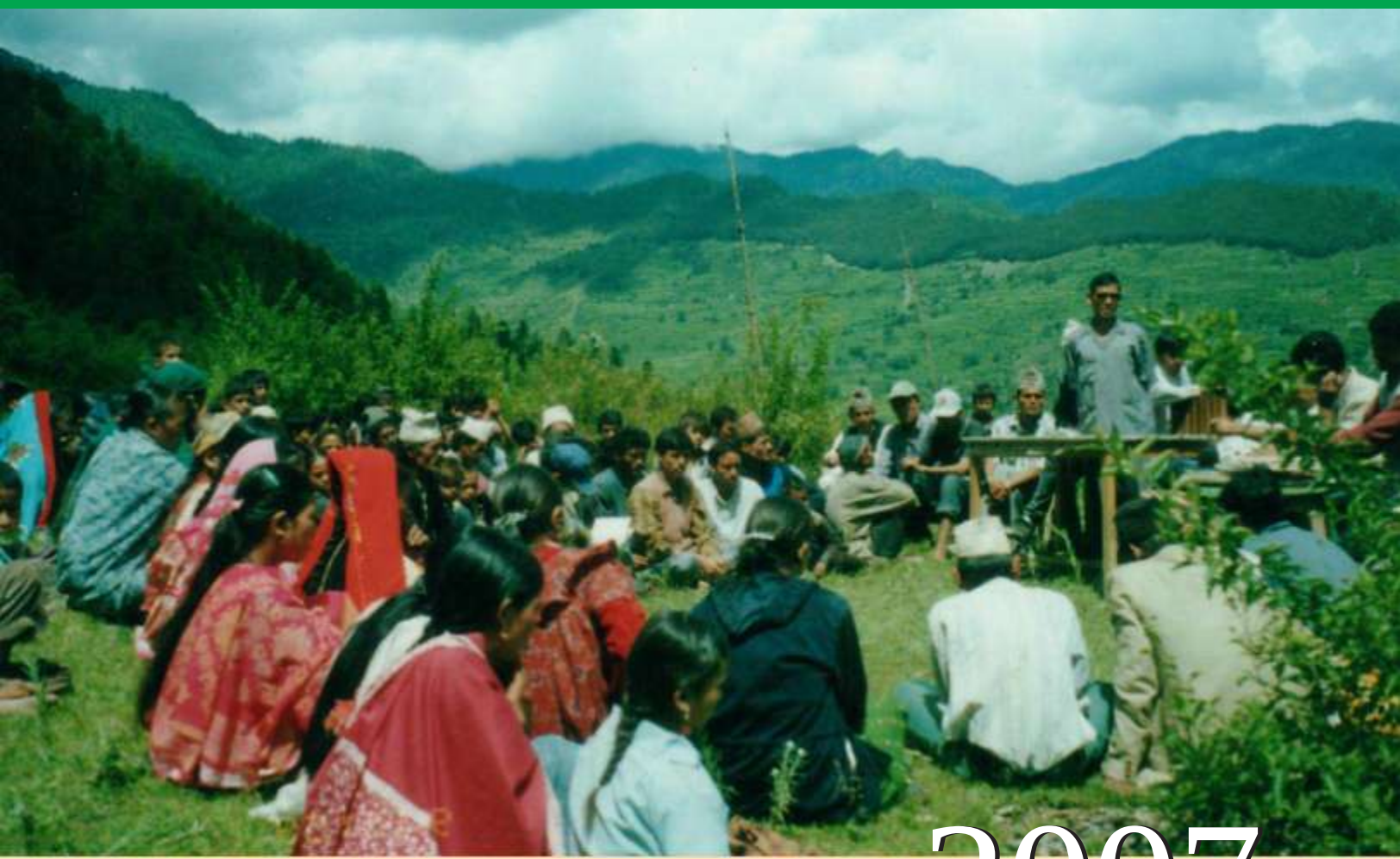
LOCAL COMMUNITIES AND NATURAL PRODUCTS:

A MANUAL FOR ORGANIZING NATURAL RESOURCE MANAGEMENT GROUPS FOR RESOURCE MANAGEMENT PLANNING, ENTERPRISE DEVELOPMENT AND INTEGRATION INTO VALUE CHAINS



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DISCLAIMER

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FRAME
Knowledge Sharing for the Natural Resource Community

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ACRONYMS

AAC	Annual Allowable Cut
ANSAB	Asia Network for Sustainable Agriculture and Bioresources
BDS	Business Development Service
BDS-MaPS	Business Development Services – Marketing and Production Services
BEP	Break-even point
CBNPE	Community Based Natural Products Enterprise
CBNRM	Community-based natural resource management
CBFE	Community-based forest enterprise
CF	Community Forestry
CFUG	Community Forest User Group
DFO	District Forest Office
FECOFUN	Federation of Community Forestry Users, Nepal
FSC	Forest Stewardship Council
IRG	International Resources Group
IRMS	Indigenous resource management system
LRP	Local Resource Persons
MIS	Market Information System
MSE	Micro and Small Enterprise
NNN	Nepal NTFP Network
NRM	Natural resource management
OP	Operational Plan
ROI	Return on Investment
SHG	Self-Help Group
SME	Small and Medium Enterprise
USAID	United States Agency for International Development
VFC	Village Forest Council

PREFACE

The natural resource dependent communities are getting organized and in many instances successfully carrying out conservation and resource management activities. In Nepal, for instance, there is a large organized network of community forest users groups that are dedicated to attain conservation and livelihoods objectives. At the same time we also see that the resource-dependent communities have not been able to get a proper share of economic advantages on their work. In this context, local, national and international conservation and development organizations as well as government agencies share a challenge: how to reconcile resource conservation with livelihoods and business objectives? And how can front-desk organizations and field facilitators make it happen?

This Manual aims to make a timely contribution to the needs of field facilitators and service provider agencies and organizations to facilitate community organizing for resource management, enterprise development and integration of community enterprises to appropriate value chains within the natural products sector. It is based on the experience of ANSAB's work in Nepal and is also drawn from similar experiences elsewhere. The manual provides key insights, process, methods and tools to capture on the potential of natural products sector for poverty reduction. It combines community organizing, natural resource management planning, enterprise planning and value chain integration together in the single volume so that the readers can have a more complete picture of the processes that are critical within the natural resources sector.

We would like to thank the USAID and the IRG-FRAME project for the financial contribution for the preparation of this manual. We are particularly grateful to Mike McGahuey, Dr. Pradeep Tharakan and Dr. Jack Croucher who supported in conceptualizing it. We thank Lauren Sorkin and Denise Mortimer who provided very important comments on the previous versions of this manual. We also acknowledge various contributions from Surya Binayee, Ann Koonz, Ram Hari Subedi, Indu Sapkota, Ram Prasad Acharya and Durga Regmi at various stages of this work.

We are hopeful that this manual would prove to be useful to a wide array of agencies and field facilitators working within the natural product sector, and forestry sector in particular, to design and implement their programs and interventions. We look forward to receive the valuable comments and feedback from the readers.

Bhishma P. Subedi
Executive Director, ANSAB

INTRODUCTION

WHY THIS MANUAL?

Policies promoting community-based natural resources management (CBNRM) have created an important role for communities in the conservation, management, and use of natural resources. Government agencies, non-governmental organizations and other service providers are supporting local people to get organized in various forms of Natural Resource Management (NRM) groups. Such groups are also taking up responsibilities to achieve their objectives and have made significant progress in several areas of resource governance and management. Critical to the success of CBNRM efforts is ensuring that local communities' livelihoods needs are met through the sustainable management of natural resources. Natural resource based enterprises play an important role in helping communities realize economic benefits from such resource management. Learning how to organize communities to effective manage natural resources, and natural resource based enterprises is an essential skill for any NGO or government agency dedicated to promoting CBNRM.

This Manual intends to serve the needs of agencies and organizations that are interested in facilitating community organizing, NRM management planning and implementation, community-based natural product enterprise development, and the integration of NRM groups or natural products enterprises into rewarding value chains. This Manual presents a set of processes, methods and tools with links to the successes associated with them. It evolved out of the distinct experiences of implementation of a diverse range of CBNRM projects in Nepal. CBNRM practitioners working within or beyond Nepal, especially where CBNRM is promoted, will find this Manual useful.

The following are some of the distinct features of this Manual. These also provide a highlight of how the use of this Manual could support dual goals of conservation and livelihood improvement.

- This Manual is based on ANSAB's community organizing approach to CBNRM and enterprise development as a means to biodiversity conservation and equitable economic development. Its core process, methods and tools relate to how to organize and work with the community in order to support them to manage their natural resources in a sustainable manner, and develop and operate viable natural product enterprises. On this approach communities are organized in order to be able to define their own objectives and priorities and set up institutional basis for manage the natural resources and enterprise development.

- This Manual provides a process linking the conservation of natural resources with economic incentives generated through enterprise activities. The long-term sustainability of the resource, to be achieved through conscious planning and management actions, would be realistically achieved when communities are able to derive economic incentives. Thus the Manual combines rather distinct objectives of conservation and poverty reduction/ livelihood improvement through natural products enterprises.

- This Manual takes up enterprise activities not as limited to activities at a certain point –such as some natural products production activity. This shows the ways how greater benefits to the community are more likely to be accrued with integration into the wider value chain of the product. This integration enhances systemic competitiveness for sustainable enterprise development.

WHO IS THE MANUAL FOR?

The main objective of this Manual is to provide practical guidance to development organizations and government agencies in order to achieve biodiversity conservation and equitable economic development through community-based enterprise-oriented solutions. For this, this Manual provides field workers and NRM organizations with practical insights – process, methods and tools –on organizing NRM groups, NRM planning and implementation, community-based enterprise development and integration of community-based enterprises into value chains.

In particular, its objectives are to provide field facilitators with the process, methods and tools to:

- Facilitate organizing community members into NRM groups for sustainable natural resources management and community-based natural product enterprise development;
- Support NRM groups for developing and implementing plans for sustainable management of the natural resources (especially forest resources), such as with resource inventory/ assessment, biodiversity monitoring, micro-level planning and implementation;
- Facilitate the establishment and operation of community-based natural products enterprise development;
- Provide key insights, experiences and methods of identifying and analyzing business development services and linking local enterprises into the wider natural product value chain.

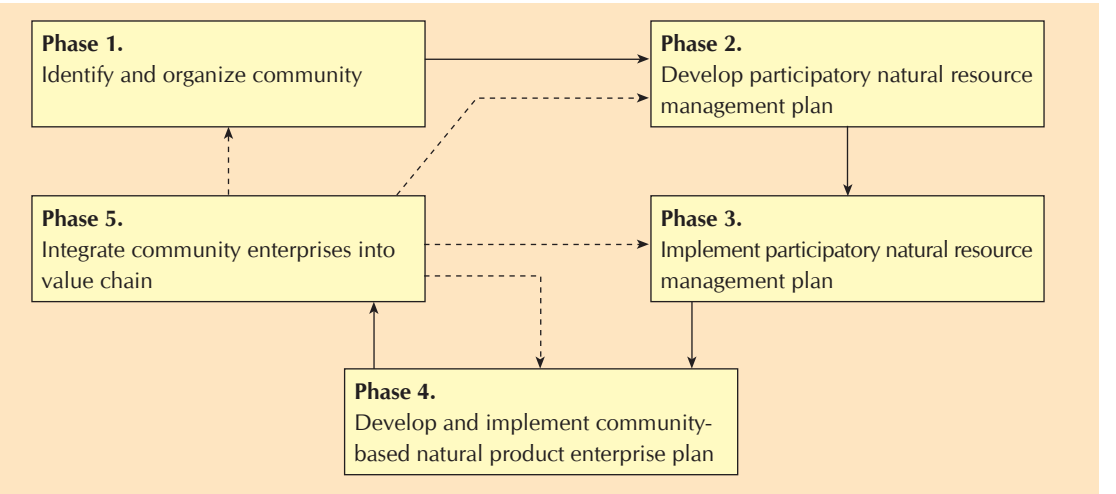
Though this Manual can apply to management of a diverse range of natural resources, it is developed mainly with the experience on forest resources management and non-timber forest products (NTFP)-based enterprises. The processes, methods and tools, as well as the cases presented in this Manual are drawn on from within the framework of participatory forestry in Nepal. These highlight more recent experiences of community-based natural products enterprises, forest certification, and business development service and value chain analysis. In case of enterprises, it can be used for those in the process of establishment, or those that are already established, but yet to come into smooth operation. Several of the processes, methods and tools given in this Manual came from ANSAB's program implementation from 1994 to 2006.

This manual is intended for use by field-level facilitators and agencies and organizations working in supporting NRM groups at local level. This is particularly to serve the needs of the following:

- Practitioners at the field level;
- Community forestry/NRM facilitators;
- Community groups, federations and associations;
- Natural product enterprise/marketing facilitators;
- Field staff of government agencies;
- NGOs, Projects and Program personnel;
- Field-level development workers;
- Training organizations; and
- Entrepreneurs, natural products business associations.

MANUAL FLOWCHART

This Manual outlines five distinct phases from identifying and organizing the community to integrating community enterprises into value chain (See figure below). These five phases comprise the five core chapters of this Manual.



Note: In the above figure the plain lines represent step-by-step process and the dashed lines represent 'conditional' steps, i.e., steps to be followed depending on the conditions of the NRM groups or enterprises.

SUGGESTIONS FOR USE

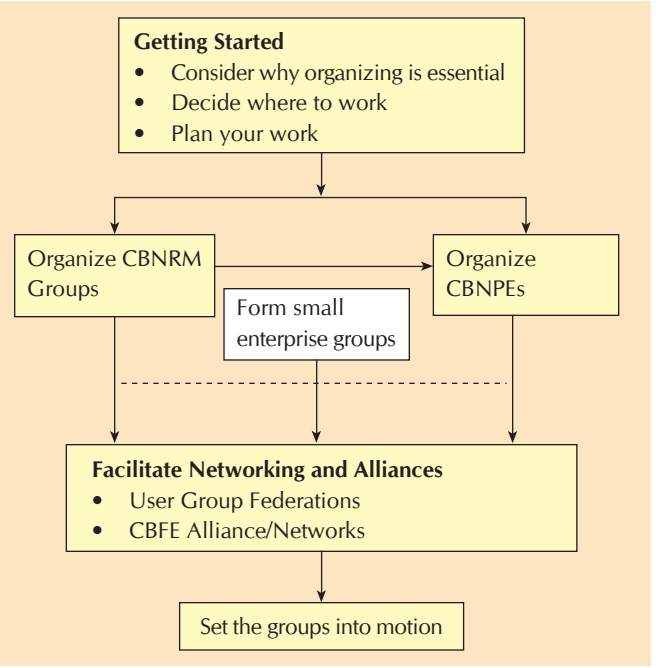
The following are some suggestions that could be useful to the readers of this Manual:

1. Each of the five core chapters in this Manual are organized according to the five phases outlined above. Thus we suggest the readers, especially those who work in a new site, to start with Phase 1 and move in a sequence to Phase 5.
2. For those who have previously completed work on earlier phases (e.g., Phase 1), they can start with the next phase. Or if some work on such earlier phase is complete, but some activities are not carried out, the readers should go through that phase.
3. Within each of the phases (chapters in this Manual), a set of processes, methods are tools are presented. While these are organized in a step-by-step sequence based on ANSAB's experiences, field facilitators need to consider their particular situations to decide on planning and carrying out the activities.
4. Field facilitators need to consider their previous experience of working in specific sites or social settings or generally of facilitation on activities closer to those outlined in the five phases of this Manual.
5. It is thus advised to adapt the process, methods and tools of this Manual, and use them in a flexible way to fit to actual circumstances under which field facilitation has to be carried out.

1 IDENTIFY AND ORGANIZE COMMUNITY FOR NATURAL RESOURCE MANAGEMENT AND ENTERPRISES

Many natural resources exist as commons resources. It is well known that use of the commons resources, in the absence of proper governance and organizational framework, is very likely to lead to over-extraction and consequent degradation of the resource. On the other hand, organized community-based natural resource management (CBNRM) groups can perform better when natural products enterprises are to be developed. In addition, group organizing helps clarify the users' objectives, governance structures and render predictability to management actions and outcomes.

In this chapter (See the Figure), you will first consider why community organizing is essential, decide where to work, and subsequently to plan your work. You will first have three options of the groups to organize: CBNRM groups (or Community Forest User Groups, CFUGs), small enterprise groups, and community-based natural products enterprises (or community-based forest enterprises, CBFEs). Depending on community's situation (group characteristics) and resource conditions, you may choose to form either small enterprise groups, or other forms of CBFEs. These two, however, may follow the formation of CBNRM group in most situations, or could be carried out independent of CBNRM group formation. This will be followed by a process of alliance or federation building and then to put the groups into motion.



1.1 GETTING STARTED: PLANNING FOR COMMUNITY ORGANIZING

1.1.1 Consider why community organizing is essential

Organizing natural resource users into a NRM groups serves resource governance, economic, and institutional functions. Group organizing helps governing the resources: setting out rules and norms for conservation and management of the resources, the extraction of products, and the fair and equitable distribution of benefits. In addition, NRM groups can also be organized for two principal purposes: for management of the resource, such as conservation and subsistence, and for enterprise activities. Community organizing for both these purposes will be outlined in this chapter.

Who are NRM groups?

The NRM groups, as used in this Manual, refer to those formal or informal groups, mainly inhabiting in settlements closer to a forest area that are collectively using and managing the resources. The members of NRM groups depend upon the resource for their livelihoods, and some members are exclusively dependent on the resource for their survival.

Groups can be both formal and informal. Informal groups generally evolve out of local traditions. Formal groups are often created with support from government agencies or other service providers, have a statue (constitution) and are generally registered to some government body. In general the NRM groups are characterized by members that are poor and marginalized, with little linkage to outside market. In many instances these groups comprise of tribal and indigenous peoples. They also have their distinct knowledge systems, traditional medicinal practices and forest management practices. The CBNRM groups need to have certain formal, official recognition at least for their participation in enterprise or marketing activities, such as processing essential oils or export of herbs. Group organizing also includes this formal process.

Examples of CBNRM Groups

Nepal: Community Forest User Group (CFUG), Leasehold Forest User Group, Buffer Zone User Group, Conservation Committee

India: Self-Help Group (SHG) or Village Forest Councils (VFC); Van Panchayat

With dedicated external support, the NRM groups could realize economic and institutional objectives. Economically, the NRM groups can be supported to improve their income or economic position or to better access a needed service.

Economic Benefits of Group organizing

- Improve bargaining power- Combining the volume of several members leverages their position when dealing with other businesses.
- Obtain market access or broaden market opportunities -Value is added to products by processing or offering larger quantities of an assured type and quality to attract more buyers.
- Improve product or service quality - Member's satisfaction is built by adding value to products, competition the group provides, and improved facilities, equipment, and services.
- Reduce Cost/increase Income- Reducing the groups' operating costs increases the amount of earnings available for distribution to members to increase their income.

Source: MoA, 2003

Institutionally, organizing the communities is important for a number of reasons:

- Organizing helps set up a predictable and systematic basis for the functioning of NRM groups;
- It increases the voice of the community members, such as to influence local level service delivery or articulate for policy decisions in their own favor;
- It allows for greater discussion and deliberation at the local level, so that the voice of the poorer groups is more likely to be heeded;
- It often provides a legal recognition to the group;
- It helps pool together knowledge, skills and experience of group members for the better management of natural resources.

1.1.2 Select the site where you will be working

Before you go for facilitation of organizing the communities, you are likely to come across with a question: where to start the work? Government agencies, NGOs, or other support providers generally have two situations in this respect. First, they already have some program or project to deliver services in generally in broadly defined target sites or communities. Second, community members from particular areas may approach them to request for facilitation services.

In either case, choosing where to work depends on certain considerations. Following are key criteria that you'll find useful to choose where to work:

- Feasibility: Interest of the community members to engage in community organizing and enterprise development
- Need: priority of the government, availability of alternative service providers, social and environmental indicators, such as poverty incidence, level of resource degradation.
- Reliability: how the work/model used can be replicated
- Resources and know-how: Does your organization have enough resources and know-how to work in the particular site(s) or communities.

Note: *you can add further criteria depending on your organization's strategies or the area you are working.*

How can you do it?

- Identify the potential sites where you would work, or those other sites from where requests for facilitation services are received;
- Collect basic data from secondary sources and your organization's own records (e.g., data and information on population, forest area, resource degradation/improvement status);
- Make a reconnaissance visit to the identified sites- to observe resource situations and to conduct preliminary consultation with local people;
- Analyze which site is the most attractive or suitable for your organization to work. You can use attractiveness matrix (See the table below);
- Hold a consultation meeting with key stakeholders: present your work objectives and preliminary analysis, avoid duplication of work, develop coordination mechanism, and finalize the sites; and
- Develop a map: locate in a map the sites where you'll be working.

Tools/methods that you need for site selection:

- Government's periodic plans and other National Planning Commission documents (e.g. sectoral Master Plan, district plans, etc.)
- Office records of government agencies (e.g., District Forest Office, District Development Committee, Range Post or Area Forest Office records, Department of Cottage Industry data)
- Your organization's records
- Reconnaissance visit and village-level consultation with opinion leaders
- Attractiveness Matrix analysis
- Stakeholder meeting
- GIS or topographic maps

Attractiveness Matrix

Site	Attractiveness Score*						Overall score**
	Criterion 1 Feasibility	Criterion 2 Need	Criterion 3 Reliability	Criterion 4 Resources	..	Criterion 10	
Site 1							
Site 2							
Site 3							
…							
..							
Site 15							

* See brief description of the four criteria above. Use Attractiveness Score from 0 to 3, as increasing order of attractiveness of the site to work. For instance, a score of zero means a site least attractive with respect to a certain criterion, and score of 3 means that it is the most attractive.

** Add scores for all criteria for the site, and the higher the overall score the more attractive the site.

1.1.3 Be prepared to work in the field

After you identify the site and community for facilitating CBNRM group organizing, you will have to proceed with the following:

- Identify the community and the resource under consideration;
- Gather data on the community and the resource;
- Consult local stakeholders, including key informants, government agencies, NGO personnel;
- Consider your (your organization's) experience and strength;
- Discuss with the local people to clarify the purpose of organizing;
- Determine the roles of both local people as well as support provider agencies;
- Plan for the field visits and be prepared to stay in the villages.

Tips:

- Employ local staff, or persons having knowledge of the community;
- Review your past experience of work in the area;
- Understand and build on the customary institutions of the community. It must, however, be borne in mind that certain traditional institutions/practices might be founded on unequal power relations;
- Respond to villagers who are demanding technical or other assistance;
- Review the policy and legislation pertaining to community forestry and user groups.

1.2 ORGANIZE CBNRM GROUP- HOW CFUGS IN NEPAL ARE ORGANIZED?

Here you will learn the process of organizing a community-based natural resource management (CBNRM) group. Six basic steps of organizing community forest user groups (CFUGs) in Nepal will be explained below.

After organizing a CBNRM group, you will have supported the group to complete the following:

- Identify who is the member of the CBNRM group- through a process of selection and self-election of the members
- Define the overall purpose and specific objectives that the CBNRM group wants to achieve
- Work out an enduring group structure: general body, executive committee and other variants (depending on the nature of the group)
- Decide on the rights and responsibilities of members and executive members portfolio positions
- Articulate and decide on the processes of decision-making, accountability, transparency of the group
- Develop a mechanism for equitable sharing of benefits that arise from the management of the resource
- Develop a statute (constitution) of the group
- Complete or at least initiate official registration of the group.

Nepal's legislation recognizes community forest user groups (CFUGs) as self-governing and autonomous entities and entrusts them with the management, control, utilization and sale of community forest resources in a planned way. The CFUGs have use rights over the resource, and the rights to exclude others from using the forest.

What does community forestry in Nepal entail?

The government of Nepal has been promoting a participatory management approach to the conservation and utilization of forest resources. This approach is commonly referred to as community forestry, and implemented through community forest user group (CFUG) agreements. In a CFUG agreement, management responsibilities and rights are handed over to traditional forest users for the betterment of the forest and the people living around the forest site. In determining which forestlands will be handed over to the local people, the forestry policies set three criteria:

- Interest of the community;
- Accessibility of the forest (distance from the settlement); and
- Management capacity of the users.

Nepal's Forest Acts (1993), Forest Regulations (1995) and community forestry directives provide guidelines for the community forestry program. A forest management operational plan (OP) is required before management responsibility is handed over to a local community. In many cases these plans do not incorporate non-timber forest products (NTFPs) and most often cover too small an area to achieve effective biodiversity conservation.

The following are the six basic steps and requirements in the CFUG formation process for handing over forests to local forest users in Nepal.

1.2.1 Step one: Identify forest area and users

This step involves identifying all the households who are the users of the particular forest. In this step a proposed community forest and the corresponding CFUG members are identified side-by-side.

- Prepare a participatory social map showing the settlement(s), households and the forest- that helps identify household members.
- Conduct a household survey to collect information on population structure, number of animals, land size and productivity, forest use, etc.
- Assess of the people's interests, capacity of forest management, and the forestry extension activities. This requires various levels of community interaction.

Basic considerations in identifying forest area and users:

- A shared natural resource- customary ownership and use of the resource
- Consider who are dependent on the resource
- Need of group organizing to govern/manage the resource
- Willingness of the community to manage the resource
- existing functional groups
- existing resource use and management practices
- homogenous/heterogeneous community
- Make a tentative agreement on the membership of the group and forest area/boundary
- Develop a plan with the group members for further work

Consider different situations.

These households make up a forest user group (FUG). However, user identification and group formation process can become lengthy and complicated if there is conflict between settlements or individuals in claiming forest area for the group, and use right and responsibility of the members. The forest users are entitled to a certain level of membership based on their use rights and management responsibility. In certain instances, the CFUG members are classified as:

- Primary, and
- Secondary (with limited rights and responsibilities).

The FUG identification work is tied to the forest area, but at this time actual forest demarcation does not take place.

At this step of community organizing, you needed the following tools/methods:

- Home visits
- Focus group discussion
- Key informant survey, discussion with opinion leaders
- Field observation
- Meeting with local agencies, organizations

Do not exclude the poor in user identification process.

Poor people are most often directly dependent on the natural products- for food, medicine, and a variety of other uses. However, their access to the resource might get compromised when a systematic resource management planning is set in place. You will thus need to identify the poor members within the group, discuss their needs and demand in detail within the poor group, and incorporate them into decision-making.

1.2.2 Step two: Form the community forest user group (CFUG)

- Conduct different levels of meetings at the village- household, hamlets, key informants, poor groups, women groups, artisans, etc.
- Make notes of the issues raised by these groups
- Encourage all members to raise their concerns, issues and demands in the general assembly
- Organize a general assembly- with participation of all members, in a date and venue and for such purposes discussed and decided by the community members.
- Encourage the group in the general assembly to draft/prepare a constitution, which covers group management and functioning.

Key elements of the CFUG constitution

- general characteristics of the group;
- group objectives; membership status;
- formation of the executive committee;
- meeting of the committee;
- assembly of the group;
- roles and responsibilities of the forest users and committee members;
- fund collection, utilization and control mechanism;
- provision of forest protection and management;
- provision for enterprise development and other development activities;
- fines and penalties
- staffing and
- Amendment of the constitution.

- Ask the general assembly to select a provisional executing committee, which is responsible for registering the group with the forestry authority and leading the forest handover process.
- Facilitate the general assembly in order to decide on the constitution and the community forest user group committee (CFUGC, which is the executive committee of the group). Make sure that the FUGC is representative of several groups within the community.

Depending on the community, the general assembly could be held a number of times. For instance, at a first general assembly a committee to draft the constitution may be formed, and the constitution can be approved in the next assembly. Or, if constitution preparation is included in the earlier activities (household visits, meetings, etc.), it can be finalized in a single general assembly. The facilitator needs to accommodate to whichever option best fits to the community needs/situations.

1.2.3 Step three: Demarcate the forest

This process begins along with the process of user identification (step one). However at this step, the forest area is identified, demarcated and any disputes (on forest area/boundary) settled. Follow the following:

- Prepare a participatory resource map- showing key features (steams, hill tops, grazing areas, sacred sites, etc), and the boundary identifiers (such as trails, streams, ridge, etc).
- Hold meetings with people in the neighboring areas to know whether they have claims on the same forest. If there is boundary dispute, bring CFUG members as well as these non-members to demarcate the boundary on site.
- Finalize the map of the community forest and add other important details.

Note: *Further details on forest survey are included in the next chapter of this Manual.*

1.2.4 Step four: Prepare forest management operational plan (OP)

At this step, a forest management operational plan is prepared. More technical details of the OP are outlined in the next chapter. The activities, their process and expected achievements given in the table below are indicative only.

Activities	How	What should be achieved?
(a) Carry out extension activities	• Conduct awareness campaigns • Hold interest group meetings and informal discussion with users	• Awareness on government policies, rules and regulations, importance of community forestry, and scope of forest management for their livelihood. • motivate the people to achieve sustainable resource management.
(b) Survey the forest and carry out resource assessment	• Carry out a forest boundary survey with measuring tape, compass, slope measuring instruments and topographical, land use, and other maps, with the participation by the CFUG members and adjacent communities. • Divide the forest into a number of blocks- more or less homogenous strata- based on topography, forest conditions, and management considerations. • Calculate the area for whole forest and blocks. • Carry out a forest resource inventory with a sampling method (generally systematic or stratified sampling). • Data on all blocks/strata is integrated, and overall forest condition, stocking, growth, and yield determined.	• Demarcating boundary, and determining the forest area and resource condition • Inventory data helps determine the sustainable supply of the product and the best method of resource management. • Annual allowable cut is determined, sometimes furnished with harvesting methods/techniques (with further information)
(c) Assess social situation	• Conduct household survey, focus group discussion, and interviews • Make use of secondary sources of information.	Gather information and data on the population structure, agricultural and animal husbandry situation, as well as other productive and income generating opportunities.
(d) Analyze data	• Analyze data and information from the resource assessment and social situation assessment – using sum, average, and collating and comparing of information/data.	• determine the supply of forest products and the community's demand for the products • Identify proper ways for the community to manage their resources for their benefit and resource sustainability.

Activities	How	What should be achieved?
(e) Prepare operational plan	• Use the analyzed data to insert into the operational plan • Discuss resource management options building on traditional management practices • Consider government regulations and requirements for the preparation of operational plan • Outline activities of management, utilization, and distribution of forest products and conservation of the resource • Prepare the operational plan document, get it approved through general assembly, and submit to District Forest Office for final approval.	• Prepare an operational plan (usually for 5 years) • Get formal recognition of the operational plan.

Note: *Please go through next chapter for further technical details of operational plan preparation.*

1.2.5 Step five: Negotiate with forestry authority for handing over of community forest

At this step, you can help the CFUG members to solicit technical as well as administrative inputs from government authorities (mainly the District Forest Office) and to complete the official requirements for formal handing over of community forest. Follow the following steps:

- Ask the CFUG to inform District Forest Office on their progress of operational plan and constitution preparation.
- Request the authorities for preliminary review of the OP and the constitution, and to furnish technical/administrative suggestions.
- Help the CFUG members apprise and discuss with DFO on forest area, forest harvesting and management system
- Submit an official application (on behalf of CFUG) alongwith the operational plan to the district forest office for forest hand over
- Incorporate suggestions, if any
- Be cooperative to the DFO to verify whether adjacent users have claims on the proposed community forest.
- Get the approval of the operational plan and the constitution.

1.2.6 Step six: Implement, monitor and review the OP/constitution implementation

Once the CFUG constitution and community forest OP is approved by the government authorities, the responsibility of thier implementation lies with the CFUGs itself. However, the CFUG have to consult the government authorities time to time, and also receive technical inputs in the implementation, monitoring and improvement of the OP.

The following are important steps and/or activities required for the smooth implementation, monitoring and review:

- Hold meetings and assemblies of the CFUG or FUGC on a regular basis to decide the management and harvesting plans (plantation, collection of NTFPs, fencing, thinning, pruning, etc).
- Manage the daily activities of the user group according to the constitution.
- Review in the CFUGC meetings as well as in general assembly as to whether activities are going on as planned, look for discrepancies, and plan for more practical options.

- Review the performance of the CFUGC in general assembly, and suggest ways for better functioning.
- Review the collection and use of CFUG funds, and make sure that accounts are maintained in transparent way. Carry out public audit of funds.
- Develop annual plans as broadly laid out - first by CFUGC meetings, and get approval through discussions in the general assembly.
- Help government authorities monitor the forest management activities of the group and take up suggestions.
- Work out what revisions in the OP or constitution are necessary. If revisions are needed, propose the same in the general assembly and proceed for official approval.

1.3 FORM SMALL ENTERPRISE GROUPS

The CBNRM groups (e.g., the CFUGs as outlined just above) are often meant to work for the conservation and general management of the natural resources. The group members are often very diverse and so are their needs and expectations. In certain situations, the needs of different members within the groups cannot fully be met within the framework of such 'generic' groups. In other cases, pursuing certain specific functions would not be economically viable or otherwise not desirable for such groups. In either of these cases, small specific-purpose groups can be formed out of the CBNRM groups. With such specific-purpose groups in place support organizations can also plan focused interventions to target them. Example of such specific-purpose groups includes:

- Small enterprise groups
- Saving and credit groups
- Self-help groups

CFUG Sub-groups as Small Enterprise Groups

In Dolakha district, ANSAB supported to form small enterprise sub-groups within CFUGs. A set of criteria was used to identify members that could be included in the sub-group. From among 10 CFUGs in the district, a total of 398 community members were found to be collecting/selling more than 25 kg of forest products (major species- Lokta, Argeli, Majitho, Jhyau) in a year. These members were amongst the poorest in their villages. They lived in the forest fringes and were heavily dependent on forest. Bringing such members together, a total of 22 Small Enterprise Groups were formed.

A tri-partite agreement between these special groups, CFUGs and DFO was made to ensure these groups' right over the forest. These groups were supported for saving-credit scheme to cover financial needs for enterprise activities and day-to-day expenses. CFUGs are provided with matching funds to develop enterprise development fund. The CFUGs' fund mobilization guidelines were prepared, and these had provisions to allocate funds for Small Enterprise Groups to cover enterprise development costs.

As the members of the Small Enterprise Groups were mostly from the poor and marginalized groups, bringing them together was a challenge in the beginning. They needed continuous orientation and coaching to work for business and enterprise development. Still there is a need for massive efforts for training and orientation. External support is further needed in leadership development, efficiency enhancement, marketing, basic office management etc. However, the creation of Small Enterprise Groups has helped provide focused support (especially on enterprise development), utilization of otherwise unused barren land within community forest, better use of CFUG funds, creation of employment for poorer sections.

Steps: How to organize small enterprise groups?

- Discuss the need/feasibility of the formation of Small Enterprise Groups within the CFUG executive committee
- Develop criteria for member selection and outline tentative objectives that such groups can achieve
- Help/facilitate the selection of the members from within CFUGs (facilitator and the CFUG executive committee working together)
- Ask each identified member whether they would be interested and active in that particular group
- Hold separate meetings of the small enterprise group members, and work out the relationship between FUGC and the special group.
- Facilitate community members to form separate special group of micro enterprises
    - o Discuss within members how members can contribute to the micro-enterprise
    - o Explore and negotiate for support as available from within CFUG
    - o Explore and demand support from other agencies
- Develop business plan of the group (depending on the group, it could be a verbally agreedsimple plan, or slightly elaborate, written plan. See Chapter 4).
- Prepare operational policies and strategies (depending on the nature and size of the group it could range from simple, informally agreed set of strategies to written, formalized policies/strategies of the special group).
- Implement the business plan and strategies.
- Monitor the progress against the group objectives and take corrective actions.

1.4 FORM COMMUNITY-BASED NATURAL PRODUCTS ENTERPRISE ENTITIES

Formation of community-based natural products enterprises (CBNPEs) depends mainly on the kind of ownership structure of the enterprise. There are several ownership types of a natural products enterprise. The main ownership types found in Nepal include:

- Sole enterprise
- CFUG enterprise (including the small enterprise group)
- CFUG consortium
- Cooperative
- Company

The following table provides a brief description of each of these common ownership types, and the type of products these entities are handling.

Commonly found enterprise ownership types in Nepal

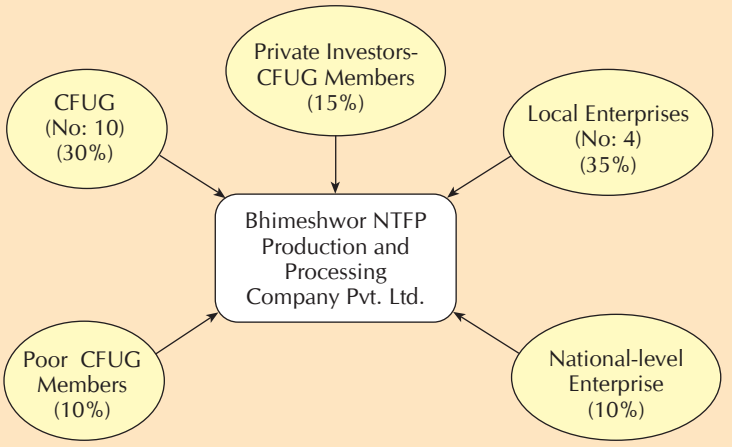
Types	Brief description	Products types handled
Sole enterprise	Enterprises primarily owned and managed, with or without formal registration, by an individual or a household.	Timber (furniture, logs and poles); Other wood products (handicrafts, carvings, implements); Fuelwood and Charcoal; Plant fibers (Lokta paper, ropes and cloth from Allo, Hemp, Bhimal, Bhorla, Sabai grass); Medicinal plant products; Traditional medicines; Essential oils; Food and spices; Brooms; Bamboo and rattan products; Fodder and grass; Leaf products (plates, handicrafts); Others (soap nuts, incense, herbal dyes)

Types	Brief description	Products types handled
CFUG Enterprise	Individual FUGs, leasehold groups or other community groups managing forests as a common property resource and producing, selling or distributing forest products.	FUG Timber (sawn timber, furniture, logs and poles); Fuelwood and Charcoal
CFUG Consortioum	Two or more FUGs working together for the collective production and marketing of forest products.	Timber (sawn timber); Plant fibers (Lokta paper); Medicinal plant products; Essential oils
Cooperative	Formal or informal networks of individuals and groups collecting, processing, and trading forest products.	Plant fibers (ropes and cloth from Allo); Medicinal plant products; Food and spices Leaf products (plates, handicrafts)
Partnership	Generally a partnership of two individuals	Timber (sawn timber); Plant fibers (Lokta paper, Argeli whiteskin); Essential oil; Leaf products (plates, handicrafts);
Company	Corporate entities registered as per prevailing company legislation in Nepal which at present allows a maximum of 50 shareholders.	Timber (sawn timber); Plant fibers (Lokta paper, Argeli whiteskin); Essential oil

How do you form community-based natural products enterprises?

- Consider which of the ownership type suits to a particular community [See Table above]. Consider, for example, whether CFUG itself is likely to transform into an enterprise entity, or whether only few CFUG members are likely to be involved in the enterprise. The enterprise could also be owned by different categories of people/entities [See for example in the Figure].

Example: Ownership structure of a natural product enterprise (company)



Percentage within parenthesis refers to the percent of shares for each category.

- Discuss with the community members of the pros and cons of each of the enterprise ownership model [See the Table below]. The table allows you to judge the enterprise models with respect to market-related, environmental, social and technological considerations.
- Review the government regulations concerning the registration and operation of each of the ownership types
- Proceed for registration of the enterprise (However, a CFUG enterprise does not need separate registration. Sole enterprises may also be operated on an informal basis. However, if the enterprise plans for exporting products, it needs to be registered as a company in Company Registrar's Office and should have export license. Similarly Cooperatives are registered at District Cooperative Office. For companies, Articles of Incorporation and Regulations need to be submitted, while for Cooperatives, their Statutes have to be approved. Refer to Company Act and Cooperative Acts for details of the requirements.)

Registration is not always easy.

This Malika enterprise was registered in Office of the Company Registar Kathmandu. It is also essential to register this enterprise in District Cottage Industry (DCI) Office, Bajhang. To legalize the enterprise, district forest provides a recommendation to the DCI office. District Forest Office does not make any co-operation for the welfare of FUG. Up to now this enterprise does not register at DCI. District forest Office demanded the agreement of the product marketing. The copy of the agreement was also provided by the enterprise to DFO. DFO again demanded the original copy of that document. That creates a difficulty to register that enterprise. Without registration, one cannot pay the income tax. However, policy provides sufficient support to the community. It does not implement in reality. It seems that facilitators should make a smooth relationship to all possible and should plan activities according to their interests.

- If 'company' is agreed as a suitable enterprise modality, consider the options for ownership of diverse categories of people: CFUGs, individuals, local traders, poor members, national enterprises etc. This can provide opportunities for bringing together strength of these groups and coordinate different functions for mutual advantage. In the Bhimeshwar NTFP Production and Processing Company (See figure), for example, CFUGs provide raw materials, national-level enterprises take up marketing responsibilities, and local enterprises bring in technology/skills and marketing. But who should take share in the company and the percentage of their share have to be decided on the basis of whether it will benefit the CFUG members.
- Develop a business plan and operate the enterprise [See details in Chapter 4].

Comparison table to decide on enterprise modalities

Decision Factors	Enterprise Ownership Type				
	Sole enterprise	**FUG enterprise**	**FUG consortium**	**Cooperative**	**Company**
MARKET: Price	No bargaining power unless organized into a trade association; difficult to guarantee agreement on sale price to buyers	Potential for own financing and therefore for increased bargaining power, but difficult to reach agreement amongst all members on sale price to buyers	Potential for own financing and therefore for increased bargaining power, but difficult to reach agreement amongst all members on sale price to buyers	Potential for own financing and therefore for increased bargaining power. Can also achieve agreements amongst members on sale price to buyers	Potential for own financing and therefore for increased bargaining power and can also easily reach agreement on sale price amongst shareholders
Economy of scale	Difficult to achieve	Can be achieved	Can be achieved	Can be achieved	Can be achieved
Access to transport	Difficult to organize	Easy to organize	Easy to organize	Easy to organize	Easy to organize
Access to forward linkages and services	Difficult to achieve	Management capacity is lacking to organize this	Management capacity is lacking to organize this	Management capacity is lacking to organize this	Better management capacity to achieve this
ENVIRONMENT: Biodiversity	No positive impact can be guaranteed and chances of negative impact are high without peer pressure	Potential for good impact if participation of all users is ensured and conflicts are resolved	More difficult to ensure participation but has potential for good impact	Good impact is only achieved if increased income results in in-creased awareness of conservation	Good impact is only achieved if increased income results in increased awareness of conservation
Management and monitoring can easily be organized	Needs good linkage with FUG and can't be ensured	Can easily be organized	Can easily be organized	Needs good linkage with FUG in order to be possible and can't be ensured	Needs good linkage with FUG in order to be possible and can't be ensured

Decision Factors	Enterprise Ownership Type				
	Sole enterprise	**FUG enterprise**	**FUG consortium**	**Cooperative**	**Company**
SOCIAL: Distribution of income	There is no control over equity	Potential to be equitable if there is transparency and good participation in decision making on FUG funds	Potential to be equitable if there is transparency and good participation in decision making on FUG funds	By - laws guarantee equity and transparency with distribution of dividends, but distribution of work opportunities may not always be equitable	Equity is only ensured through Distribution of shares. Influential share holders can dominate decision making
Participation of women	Potential to be very high if it's a women owned enterprise, or an ethnic group in which women are allowed decision making roles	Potential for it to be high only if there is support for participation in decision making in FUG committee	Potential for it to be high only if there is support for participation in decision making in FUG committee	Can be very high in the case of a women's only coop	Potential to be very high in the case of a women's only company, but there are no examples in forestry sector (only in handicraft sector)
Impact of Policy	No advocacy power with DFO	Strong advocacy power and potential support from FECOFUN and NGO	Strong advocacy power and potential support from FECOFUN and NGO	No advocacy power with DFO	No advocacy power with DFO
TECHNOLOGY: Access to value addition	Poor access	Good access	Good access	Good access	Good access
Sustainability	Very difficult to ensure	Can be ensured with good management	Can be ensured with good management	More difficult to ensure continuing linkages	More difficult to ensure continuing linkages

Source: Subedi et. al (2002)

1.5 FACILITATE NETWORKING, ALLIANCE AND FEDERATION-BUILDING

As the CBNRM groups, or community-based natural products enterprises as organized and their objectives and activities become clear, opportunities for alliance and federation-building arise. Networking, alliance or federations provide several benefits to such groups, such as influencing government policies, demanding services, or ensuring economies of scale through integration of several functions. Depending on the CBNRM group or the kind of enterprise, such networks, alliance or federations vary.

The formation of networks, alliance or federations is not necessarily an essential step of group organizing, resource management or enterprise activities. However, these are created generally based on the felt needs of the constituent members. Ensuring the rights of the members, increasing their voice, getting economies of scale are some of the objectives these networks can achieve. So such networks may be conceived of after a reasonable time of operation of the CBNRM groups or enterprises.

Example of networks, alliance or federations

- Federation of CFUGs (e.g., FECOFUN)
- Fair trade group
- Sustainable Biotrade Group (See Section 4.5)
- Apex marketing body (could be formed by CFUGs, cooperatives, etc. to facilitate large-scale marketing or export)
- Landscape level management committees (group of neighboring CFUGs)
- Enterprise clusters- different enterprises within a particular area/cluster product networking
- Federation of companies, especially for large ones (e.g., Federation of Nepalese Chamber of Commerce and Industries)

How can you promote networks, alliance or federations?

- Let the CBNRM groups or enterprises operate on its own for a reasonable period of time (it could be one year, or few years depending on the nature of the group or enterprise)
- Explore and discuss within the groups or enterprises how the formation of networks can be beneficial to them
- Hold a meeting of the groups or enterprises in a particular area (e.g. a district, zone or some other administrative region) and explore how their joint efforts and networking promotes their interest
- Discuss the advantages and disadvantages (e.g., operating, transaction costs etc) of having the network
- If networks, federations or alliance are considered essential in these discussions, form a task force, or an interim committee to prepare a statute of the network, or just develop a loose and informal network
- Get the decision through the task force or interim committee whether the network, alliance or federation needs a formal recognition or registration
- Develop the statute if necessary
- Hold a general assembly and proceed for registration
- Upscale the federation, network or alliance (if necessary) to a regional or national level.
- Develop a system of continuous communication, democratic decision-making, and feedback mechanism at various tiers of the alliance, network or federation.

1.6 SET THE GROUPS INTO MOTION

When a CBNRM group or an enterprise is organized (and alliance, federation or network established), these must be functioning in a proper manner to achieve their objectives. The following table shows some key considerations for setting these groups into motion.

Issue	Key suggestions
Planning process	• Make it both a periodic and continuous process • Allow for continuous monitoring, mid-course correction and improvement • Ensure that activities are tied to the objectives of the group.
Participation of group members	• Ensure through continuous discussion and communication of the unity of purpose of the group. • Ensure that the group members are involved in planning, decision-making, monitoring, etc.
Transparency	• Develop a system of accounts and audits available to the notice of members. • Conduct public audit of accounts • Ensure participation of members in the decision making • Publicize key decisions of the group and circulate to members.
Accountability	• Include in the group's statute or regulations how the executive committees will be made accountable to their decisions • Develop a system of rewards and punishments
Solicitation of external support	• Explore what technical and other supports are available from government and other agencies. • Make a financial assessment of different services (and privileges) available to the enterprises, and rank them for a decision on which option to pursue. • Utilize such support to the advantage of group members.
Equity and social responsibilities	• Explore how the group can work to benefit the women, the poor and other disadvantaged people- such as in ownership of the enterprise, employment, provision of loans, or other financial support

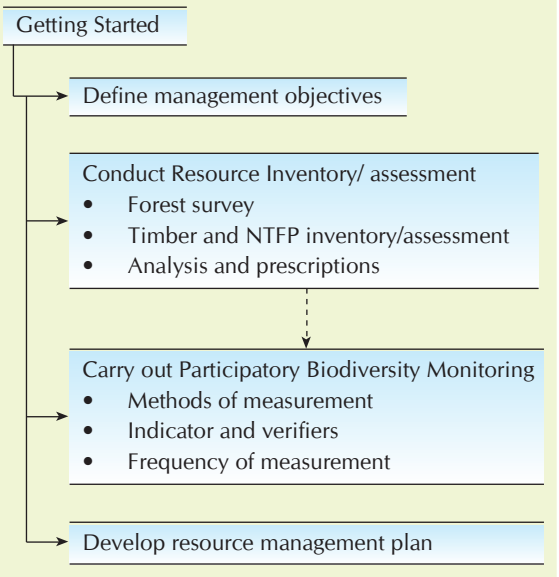
2 DEVELOP AND IMPLEMENT PARTICIPATORY NATURAL RESOURCE MANAGEMENT PLAN

2.1 GETTING STARTED

After you go through this chapter, you will have important practical insights on developing a participatory natural resource management plan. The process, methods and tools outlined in this chapter are drawn mainly from the community forestry experience of Nepal, with particular reference to the considerations of biodiversity conservation and enterprise development. Thus the key purpose of this chapter is to enable to facilitators to move through a process of developing resource management plan.

In this chapter, you will learn (See figure):

- Defining management objectives
- Resource inventory and assessment
- Biodiversity monitoring
- Development of resource management plan



Note: *The dashed-line shows an optional step, to be pursued depending on management objective.*

2.2 DEFINE MANAGEMENT OBJECTIVES

Resource management planning starts with a clarity of management objectives. It implies the owners/managers of the resource are clear from the beginning what they want to achieve with the management. While resource management objectives vary across different groups, NRM is tied in general to two distinct objectives: (a) conservation –protection of species, ecosystems or the ecological sustainability, and (b) poverty reduction –income and employment generation, and equity.

How to define the objectives?

- Hold household level meetings of the NRM group/CFUG- to solicit what they expect from the resource and how they can achieve it.
- Hold interest group meetings- artisan groups, traditional healers, etc. and collect and compile their needs and expectations
- Meet with poor groups- consideration of specific needs of the poor groups- such as their subsistence, income and employment needs
- Hold a executive committee level meeting
- Consult with government authorities on the objectives they want to promote
- Develop draft goal and objectives of resource management and discuss in the executive committee of the CFUG to improve, adjust or refine them
- Present the draft before the CFUG general assembly
- Include in the forest management operational plan. The objectives should be realistic (achievable) through action.
- Plan activities to support the management objectives (sometimes objectives tend to be ideal and abstract, and activities do not tally with the management objectives. Care needs to be taken to avoid this.)
- Revise the objectives as the plan gets implemented.

Consider the Prospects for Improving Livelihoods and Conservation

- Facilitating local control of resources by providing support to existing and potential CFUGs.
- Supporting for active management and consideration of leasing some portion of community forest by forming leasehold sub-groups (LSGs) of the poor and landless households.
- Enhancing local access to commercial resources through handing over forests and pasture areas, incorporating sustainable management and harvesting systems in CFUG operational plans, allowing CFUGs to independently sell the products for their own benefits.
- Facilitating to prepare quality operational plans to ensure effective utilization of forest products and institutionalizing participatory, gender-sensitive and equitable practices.
- Organizing local harvesters and traders.
- Providing integrated business development services.

Hints: Management goals and objectives

In most situations, there are multiple objectives attached to natural resource management. Management objectives correspond to the resource condition, needs of the resource users, and enterprise and marketing potentials.

The goals may include:

a) Conserve the natural resource base,
b) Commercially use the local natural products in a sustainable manner, and
c) Assure benefits are long lasting and equitably shared by the community.

The objectives may include:

a) Commercial development of NTFPs through the creation of a local processing company,
b) Domestication of commercially important NTFPs
c) Institutionalize local natural resource management and conservation practices under Nepal's community forestry system,
d) Generate management information through biological and socio-economic monitoring,
e) Conduct training, education, and extension support to strengthen the capacity of the stakeholders.

2.3 CONDUCT RESOURCES INVENTORY/ASSESSMENT

Resources inventory and assessment helps make management decisions. Thus, resource inventory and assessment should not be taken in isolation –it should generate information needed to design NRM activities in order to achieve NRM groups' management objectives. In addition, government regulations might specify a general method and prescribe for a set of information to be generated from inventory, such as in the case of community forestry in Nepal where this information is used to approve the community forest operational plan. Thus resource inventory and assessment needs to generate both types of information.

Within community forestry, forest inventory and assessment involves:

1. Forest survey
2. Inventory
3. Analysis and prescriptions

Information needs

- Data and information needed to inform management decisions (such as for plantation, protection, harvesting scheme or harvesting methods)
- Data and information needed under existing regulations for approval of the operational plan.

2.3.1 Forest survey

Forest resource inventory/assessment most often begins with a forest survey. A forest survey is meant to depict spatial features and other forest characteristics and make these readily available in a map. Depending on the needs of the community, size of forest, nature of terrain, availability of survey instruments, know-how of technical personnel, and availability of GIS and topographical maps, the survey methods vary. Generally four methods can be considered (See box).

Methods of forest survey and mapping

- Participatory mapping
- Chain and compass survey
- GIS mapping and
- Use of topographic map

The specific techniques and tools of forest survey are very different for the methods shown above. However, you will see below two distinct cases of forest survey which are often practiced in community forestry in Nepal: survey procedures when forest areas are comparatively small, or the procedures when forest area is larger. The distinction is subjective, but a rough guide is that a size smaller than 100 ha can be considered small, and greater the large.

When forest area are small:

- Use Silva compass, Measuring tape, Abney's Level
- Measure the slope or horizontal distance with measuring tape and its slope angle with Abney's Label or Silva compass. Take bearing with Prismatic compass, Surveyor's compass or Silva compass (Note: Silva compass is very simple, easy and quickly handled).
- Record the above data in a field book
- Convert all slope distance into horizontal distance
- Map the forest into the paper
- Show in the map all permanent features
- Show the scale in the map
- Add additional features [several resource features, such as density, etc. can be subsequently overlaid in the same map).

When Forest area is large or remote and inaccessible

- Use a topographical map
- Delineate the forest boundary and block lines in the map
- Find out boundary line features are in the map and measure later (The forest boundaries and blocking line should be permanent features such as stream, river, ridge, trail etc. To demarcate forest boundaries and blocking line, measure reference features.)
- Take bearing and distance with compass and tape for field features and with scale and Silva compass for the same features in the map.
- Compare the data for the field and map, and verify for correctness and indicate field features in the map.
- Demarcate forest area in the map by sighting the field from a top point (Some part of the forest could be invisible from the point. In such case, take a number of points according to the field condition and while doing so demarcate the forest area that is visible and perfectly matching with the field features.)
- Transfer the forest boundaries and blocks from the map to a transparent paper and then marking the straight line, prick down the points to transfer to a graph paper for easier measurement.
- Orient the map and graph before transferring the area on graph paper.
- Make a precise measurement of the distance between two points with scale and bearing with protractor from the graph paper.
- Consider the scale of the topographical map used (which is often 1:63,360 in Nepal) and measure and calculate accordingly.
- Prepare the forest map in a graph paper taking independent coordinates (latitude and departure) with appropriate scale.

2.3.2 Timber and Non-timber forest products inventory/assessment

Once the forest is surveyed, and area of whole forest and blocks, as well as the boundaries and additional features shown in the map, the next step is to conduct a resource inventory/ assessment. The key objectives of inventory/assessment are to (a) ascertain the overall stock of the resource, such as of timber, (b) find out the spatial distribution of species/products, and then (c) provide inputs to sustainable management as well as harvesting.

Forest inventory has conventionally been confined to timber; and this serves only timber management objective. However, non-timber forest products (NTFPs) are receiving greater recognition for their subsistence and market-based potentials. Thus, forest inventory needs to include NTFPs assessment.

The details of timber inventory for Nepal are outlined in the Government of Nepal's Inventory Guidelines. The Table below shows the process of assessment of two NTFP species (Argeli and Lokta) as suggested steps for NTFP inventory.

Argeli and Lokta assessments in two community forests in Dolakha and Bajhang, Nepal

Key steps	Argeli Assessment in Dolakha	Lokta Assessment in Bajhang
Preliminary mapping	A participatory map of the forest was prepared showing different forest types and conditions, indicating the distribution of Argeli.	The community prepared a participatory resource map showing forests and its real users. Community members also demarcated the forest boundary on a topographical sheet.
Boundary survey and blocking	[see above for reference]	Using topographical map sheet, forest boundary was tentatively delineated. The boundary was verified with a compass and tape survey. The community forest area was calculated from the map (912 hectares), and was divided into seven blocks, based on the existing natural boundaries and forest types.
Habitat mapping and area calculation	Argeli habitat was delineated in the forest map by foresters and villagers. Through a transect walk, three density classes were laid qualitatively in the habitat map.	
Determining diameter and clump size distribution	Proportions of stems of different diameter classes were estimated through a sample of 1000 stems in 27 clumps of different sizes. The girth classes used for this purpose were : <2cm, 2-4cm, 4-6cm, 6-8cm and >8cm. These data were used to determine diameter distribution curve. The clump size distribution was also assessed to determine a suitable clump size classification for the sample inventory. Four classes of clump size were determined keeping the method simple as well as fairly accurate: small (<15), medium (15-30), large (30-45) and very large (>45).	

Key steps	Argeli Assessment in Dolakha	Lokta Assessment in Bajhang
Sampling and measurement	Taking a sampling intensity of 1%, the sampled plots (plot size: 400m2) were allocated proportionately to the three strata delineated on the stocking density map. Only the number of clumps (and not the number of stems) in each size class was recorded.	Using a stratified random sampling method, the group completed a participatory inventory of the forest tree species and NTFP in the forest. Several strata were made based on types of forest. The sampling intensity was around 1% and 136 plots were observed. Twenty major tree species and twenty NTFP species were recorded. Only seven tree species and Lokta were inventoried in greater detail. Stock of Lokta was recorded for predetermined diameter classes (below 3 cm; 3 to 6 cm; 6 to 9 cm) to identify sustainable harvesting levels.
Estimation of total clumps (by size class) and stems (by diameter class)	The data from the sample inventory were used to estimate total number of clumps by clump-size class for the entire habitat area. Similarly, the diameter distribution curve and the estimated number of clumps were the basis of estimating the total number of stems by diameter class.	
Projection of population	Assuming 30% mortality and 8 cm girth as the minimum size for the harvest, Argeli population was projected for ten years using spreadsheet analysis.	
Estimation of sustainable yield	Stems greater than 8 cm in girth were estimated using the projected population. The output table gives number of stems that can be harvested and the quantity of whiteskin produced annually. The participatory wisdom determined that the cutting would be controlled by size and not by rotational area.	Using the data from the inventory and available secondary sources (on growth rate, stem diameter and bark yield relations etc.), sustainable yield was prescribed for five years. Every year the FUG can obtain approximately 20,000 kg of Lokta bark that produces 7200 kg of hand made paper. Sampling error can be expected but experiences afterwards showed that the estimates provide a fairly accurate basis to judge the potential of Lokta supply, upon which enterprise decisions are made.
Prescribed harvesting techniques	Stems less than 1.5 m in length, even if greater than 8 cm in girth, will not be used for processing but may be used for preparing new seedlings through cutting. A sharp cutting device is prescribed so that no bark is dislodged below the cutting portion. The season prescribed for harvesting is December – February.	

Key steps	Argeli Assessment in Dolakha	Lokta Assessment in Bajhang
Incorporation of NTFP provisions in OP		The information was used to prescribe harvesting system for timber as well as NTFP used in subsistence and/or income generating activities. The plan includes a separate section on the harvesting of NTFP, particularly Lokta. The 5-year operational plan describes the forest management and harvesting activities.

Source: Ojha, HR, Subedi, BP and Dangal, SP (nd)

Thus inventory/assessment involves ascertaining the stock of the resource, finding its spatial distribution within the forest under consideration, and incorporation of that data into management planning.

2.3.3 Analysis and prescriptions

Forest inventory and assessment data and information can be analyzed and fed into management prescriptions. Two specific methods can be used (Also see the box below):

Stock Mapping:

- collect per hectare stock of particular product for each block / sub-block of the forest,
- Indicate in the map by categories (high density, medium, low etc.)
- prescribe management and harvesting options based on the map

Prescription of sustainable harvest level/allowable cut:

- Take reference from government prescriptions the allowable cut (as a percentage of annual growth for a particular species)
- Disaggregate inventory data by blocks or sub-blocks (or take whole forest if it is small, or homogenous)
- Calculate annual allowable cut for a particular species/product.

2.4 CARRY OUT PARTICIPATORY BIODIVERSITY MONITORING

Biodiversity monitoring is closely linked to forest inventory and assessment, but it has additional features and objectives. Biodiversity monitoring generates data and information needed to take appropriate conservation and management measures for biodiversity resources. Biodiversity monitoring is useful for community forest user groups, conservation agencies or programs and government agencies alike. The intent of monitoring is to discern the changes in biodiversity and to adjust resource use and conservation practices to achieve sustainability. It also provides early indication of the measures to cope with threats to biodiversity.

A participatory biodiversity monitoring:

- Does not just oversee things, but generates information and provides feedback for adapting conservation actions.
- Monitoring information contributes to the improved management of natural resources.

Thus any conservation program should have a monitoring system to ensure the conservation activities are in the right direction to achieve the intended goals.

Criteria and Indicators for biodiversity monitoring

Conventionally biodiversity monitoring is carried out by conservation bodies or organizations. However the activity is increasingly relevant to conservation and development projects, government agencies, and NRM gropups (CFUGs) alike. But the information required for these agencies could well be different depending upon their interest.

At ANSAB, three main criteria for biodiversity monitoring were developed: ecosystem health and vitality, threats to biodiversity, and social response. Each of the criteria has a set of indicators and verifiers. Indicators and verifiers may be adapted as more is learned about their validity and measurability in the field.

Note: Consult ANSAB Resource Center for the Indicators and Verifiers.

How to conduct a participatory biodiversity monitoring?

The table below provides a set of methods for biodiversity monitoring, and corresponding indicators and verifiers. It also shows the frequency with which these measurements have to be taken.

Methods for the measurement of indicators and verifiers

Methods	Indicators and Verifiers Measured	Frequency of Measurement
Resource Inventory	Vegetation types and characteristics, plant species diversity, crown cover, dead and fallen trees, organic matter on the ground, growing stock (size class distribution, plant density of herbs, green biomass, vegetation height), regeneration, threats (fire, grazing, encroachment, biomass removal)	Once in five years (at the time OP preparation and revision)
Transect Walk	Vegetation types and characteristics, plant species diversity, fungal fruiting bodies, lopped trees, crown cover, ground cover, dead and fallen trees, old growth trees, area covered by CWD, organic matter and fine litter, factors of regeneration, threats (fire, grazing, encroachment)	Biennially (including at the time OP preparation and revision)
Household Survey	Demography, cattle population, household-wide forest product demand, agricultural land, education	Once in five years (at the time OP preparation and revision)
Focus Group Discussion	All indicators related to threats and social response	Yearly
Key Informant Survey	Indicators related to threats, enterprise effects, social response	Yearly
FUG and Enterprise Records	Community participation in conservation, forest management, harvesting and use, threats (fire, theft, encroachment, etc.), fund mobilization, enterprise contributions	Yearly
Experimental Plots	Utilizable biomass, growth and yield	Yearly

2.5 DEVELOP RESOURCE MANAGEMENT PLAN

Forest management is a tool and an art of managing and conserving forests and associated lands for continuing economic, social, and environmental benefits. Management includes a variety of objectives– social, economic, environmental (see earlier section of this chapter). Forest management objectives as well as activities are fed with the information from resource inventory/assessment as well as from biodiversity monitoring.

Types of knowledge contributing to forest management

- Botanical knowledge on species characteristics, and use properties.
- Ecological knowledge on growing conditions of trees.
- Technical Knowledge on silvicultural management practices.
- Institutional knowledge on norms, rules, and regulations for using and managing forests resources.
- Behavioral knowledge on community needs and use pattern.
- Market related knowledge on economic benefits and values of forest products.
- Legal knowledge on national, international regional and state levels laws and legislation for planting and harvesting.

Source: Adapted from Munyanziza and Wiersum, 1999; Singhal, 2000

Thus a forest management planning needs to consider:

- Traditional management practices
- Priorities and needs of the CFUG members, with special consideration of the poor and disadvantaged groups
- Recent trends in commercialization of NTFPs and other forest products
- A fusion of forestry science and indigenous knowledge

Key characteristics of Indigenous Resource Management Systems (IRMS)

i. Clear-cut user groups with informal but complex sets of rights to the resource;
ii. Disputes over resources are not uncommon and user rights evolve and change.
iii. Consensus on management issues.
iv. Organizational forms are diverse, flexible, and dynamic. IRMS have an institutional substructure consisting of user rights and allocation rules at the primary level; and shared values, rules, and practices at the secondary level. Indigenous systems with no institutional base are generally ineffective.
v. IRMS are perceived by participants to be effective and important to the extent that they are successful in excluding outsiders and ensuring proper distribution of benefits.

2.5.1 Steps of Forest Management Operational Plan (OP) Preparation

The preparation of an operational plan will involve the following tasks:

- The preparation and planning
- The exploration and rapport building
- The Identification and formation of FUG (As described in previous sections).
- The Identification and verification of the forest area
- Identification of existing community management systems
- Identification and prioritization of the needs, problems, concerns and issues of the FUG and different interest groups
- Collection and analysis of information on the proposed community forest
- Identification of solutions to the needs and problems
- Preparation and finalization of the Operational Plan

The following tools/techniques should be used in the preparation of OP:

- Home visits: Household survey, awareness raising, needs/demand collection,
- Hamlet/Tole meeting
- Focus group meeting: meeting artisan, occupational groups,
- General assembly

2.5.2 Write up the Operational Plan

The writing up of the operational plan needs a joint work of the facilitator and local people. The following are the key steps:

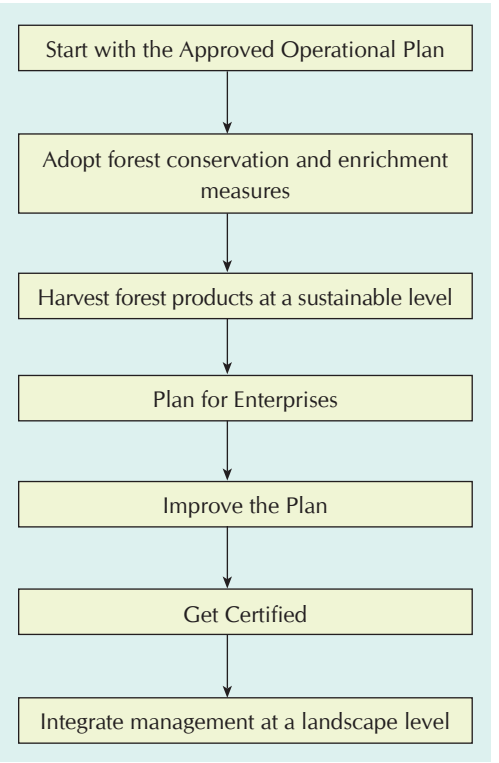
- Consider the key contents (see the box below for the requirements)
- Compile data collected in the earlier stages
- Hold focus group meetings, household discussions, poor group meetings, meeting with women groups
- Bring the information to the CFUGC meeting
- Draft an operational plan with (along with all descriptions and inventory data)
- Consult district forestry office for technical inputs
- Include the suggestions from government personnel
- Present the draft in the general assembly and incorporate suggestions
- Submit an application to the District Forest Office (DFO) for the approval of the OP (Generally, the CFUG constitution and OP is approved simultaneously). If the DFO personnel were involved in the previous stages of the preparation of OP or the constitution, the approval is likely to be fast. In other cases, DFO personnel may ask for clarification on forest boundary, membership, inventory data, prescriptions, etc, and CFUG needs to furnish information asked for the approval.

Key Contents of a Community Forest Management Plan in Nepal

1. Introduction
   - o Forest user group
   - o Forest area
   - o Objective of forest management
   - o Historical background and traditional forest management system
2. Description of forests
   - o Block
   - o Sub-block
     (boundaries, area, slope, aspect, elevation, soil type, forest type, forest condition, crown cover, regeneration status, tree and NTFP species, stock of the species, growth, and harvestable yield)
3. Forest management
   - o Description of forest user group
   - o Demand of forest products
   - o Management of timber production areas
   - o Management of firewood production areas
   - o Management of fodder and grass production areas
   - o Management of NTFP production areas
     - Management of commercial NTFPs
     - Detailed management plan for targeted NTFP
   - o Management of grazing areas
   - o Management of other forest products production areas (cattle bed, litter, etc.)
   - o Management of regeneration
4. Distribution and sales of forest products
5. Forest protection system (including forest guarding and penalty provisions)
6. Fund management
7. Biological monitoring system
8. Others (role of forest department, NGOs, and FUG association; forest products pricing mechanism, and operational plan amendment)

3 IMPLEMENT THE NATURAL RESOURCE MANAGEMENT PLAN

When the forest management operational plan (OP) and CFUG constitution is approved, the responsibility of the management lies with the CFUG itself. The CFUGs can solicit technical and financial support from NGOs or the government agencies. In this Chapter you will go through the process of implementing the natural resource management plan. It includes the following steps (see the Figure)



3.1 START WITH THE APPROVED OP

The first thing for the CFUG to move forward is to carry out the activities mentioned in the CF Operational Plan (OP).

- Discuss in the CFUGC of the provisions of the OP and constitution,
- Create awareness among CFUG members about the provisions
- Identify what are the prescriptions and activities for the year (including plantation activities, harvesting, etc.)
- Divide these annual activities prescribed in the OP into
    a. smaller periods of time (such as into semi-annual, trimester, or monthly plans, depending on the activity)
    b. blocks of forest (what activities to be carried out in which block)
    c. Divide the role for these activities have to be carried out among CFUG members in specific hamlets or specific groups or whole of CFUG members
    d. Work out the methods to carry out these activities
- Make a 'micro-plan', combining the above elements: when (time period), where (block of forest), who (among CFUG members), and how (methods). This can be documented in the CFUG minutes, or can also be informal, unwritten plan depending on the scale of activities.
- Review in FUGC meetings to see to what extent or whether present activities are helping to meet the needs/demands of CFUG members.
- Develop a mechanism for monitoring the implementation of the activities (eg, by assigning FUGC members specific roles- such as plantation, timber harvesting, fuelwood collection, etc.)

3.2 ADOPT FOREST CONSERVATION AND ENRICHMENT MEASURES

The next step for the CFUGs for the implementation of the natural resource management plan is to pursue conservation and forest enrichment measures. Generally conservation measures encompass activities that ensure that the resource conditions (such as species diversity) go on improving, or at least do not

degrade from the present level. Enrichment measures, on the other hand, imply activities that improve the forest condition, productivity or species diversity so as to better realize management objectives. Taken together these activities include, but not limited to, the following:

- Adopt the resource conservation measures laid out in the OP
- Allow grazing only to a limited level to avoid over-grazing and destruction of small growth and NTFPs. CFUG members can be convinced of stall-feeding, by adopting grass and legumes in the private lands.
- If endangered species are available in the forest, enforce strict protection through agreement of CFUG members
- Coordinate with neighboring groups to take up coordinated activities for the conservation of endemic or endangered species, or to serve as wildlife corridor [See Section 3.7]
- Carry out plantation, thinning, cleaning, pruning, singling or other silvicultural activities prescribed in the OP.
- Consider which species could be promoted in the forest with respect to the suitability of that species to the site and marketing or subsistence value of the species.
- Maintain species diversity and do minimum damage to the existing ecosystem.

3.3 HARVEST FOREST PRODUCTS AT A SUSTAINABLE LEVEL

Forest product harvesting allows CFUG members meet their forest produce demands and to sell surplus produce. Harvesting also has implications for the sustainability of the resource. Sustainable harvesting incorporates adoption of proper methods and techniques, consideration of the proper level of product extraction (e.g., annual allowable cut) and an assessment of the needs/demands of CFUG members. Thus key considerations for harvesting are: (a) which product or species to harvest, (b) how much can be harvested, (c) what is the method of harvesting, (d) harvesting season (See the Box below), and (e) demand/need of forest produce.

Generally the CF operational plans provide suggestions on these aspects. The following activities

- Discuss the harvesting methods as prescribed in the OP in the CFUGC meeting
- Adopt the species- or product-specific harvesting time, collection technique and storage. When proper time is not followed product quality and price could be significantly low
- Consider what local level processing could add value to the harvested products (simple processing methods- such air-drying, cleaning are equally important)
- Review every year what has been the effect on product abundance after following prescribed 'allowable cut'.
- Refine methods as more experience is gained.

Example: When is Best to Harvest Jatamansi?

Jatamansi is dormant from late Autumn until early Summer. During the Winter, plants are covered in snow, making harvest impractical. The plants sprout in early Summer, and grow until Autumn. When is best to harvest Jatamansi?

From the collectors' point of view, Summer is comfortable weather for harvesting work. Whole roots can be pulled up easily from the moist and less compact soil. During Autumn, however, the soil is very hard due to freezing and it is difficult to pull out the roots, further aggravated due to the cold weather. When snow falls early, the collectors may have to return empty handed.

During Summer, collectors have a tendency to collect a higher percentage of plants. Loosening of soil surface and the trampling by the grazing animals after Summer harvests accelerate soil erosion during the rains. Harvesting in Summer is also detrimental to the remaining plants and propagules as most of them decay in the rainy season. As Summer is the beginning of for Jatamansi, its collection in this period reduces its yield.

The quality of Jatamansi harvested in Autumn was found to be better than that harvested in Summer. The Autumn harvest has low moisture content, is less likely to be damaged by fungi, and produces heavier high quality essential oils. The Summer harvest contains high moisture, is likely to be damaged by fungi, and produces poor quality essential oils. Therefore, Autumn is recommended as a more appropriate season of harvesting from the biological point of view.

Source: Subedi and Koonz 1999

3.4 PLAN FOR ENTERPRISES

Implementation of the natural resource management plan is also linked to the development of natural products enterprises. Natural products enterprises often source their raw materials to the community forest, influencing management and harvesting decisions. CFUGs may also be interested to explore new marketing opportunities and to improve their systemic competitiveness- especially linked to integration into the value chain. For this they will need to bring in additional skills and knowledge to tap such opportunities, and feed into their resource management planning and implementation.

See Chapter 4 for developing enterprises.
See Chapter 5 for business development services.

3.5 IMPROVE THE PLAN

The CF operational plan (OP) should not be taken as given for ever. Good resource management planning and implementation require that OP goes on improving as more experience is gained on its implementation. Improvement or revision of the resource management plan should be fed by monitoring information on resource conditions and the extent with which present management practices have met needs of the CFUG members or have catered to market demand. Consider the following activities:

- Discuss and review in the CFUGC and CFUG general assembly about how the existing management activities are meet the product-related and other needs of CFUG members
- Discuss in the CFUGC or CFUG assembly whether the activities of the OP are impractical, unenforceable or otherwise require changes
- Explore what opportunities are missing
- Develop a tentative revision plan within the CFUGC
- Consider how improvements can be put to practice, and develop a revision plan, with time frame, responsible persons and methods of implementation
- Propose the revision in the CFUG general assembly
- Make a request to the District Forest Office for revision of the Plan
- Implement the revised plan after approval.

3.6 GET CERTIFIED

One of the promising ways how local people can reach out to international markets is through forest management certification or chain-of-custody certification. Certified products are likely to find more demand, new markets, and higher prices. In the process, the local people get feedbacks to adopt responsible practices- relating to the resource, production process, compliance with laws, labor policies, etc. Certification is becoming important to community groups with potential of selling their products to international market in bulk.

What is forest certification?

Certification is a procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements (ISO/IEC, 1991). The quality of the product or the process is stated in a standard. Forest certification provides an incentive for improved forest management and is considered as a soft economic instrument.

A wide variety of organizations have developed standards for certification and they may work in international, regional, and national level. These standards have focus primarily on ecological, social and environmental or in all aspects.

Attributes of Various Standards and Certification Programs for NTFPs

Certification program	Emphasis	Weakness	Main Message
Wildcrafter Standards	Guidelines for harvesters	Difficult to implement; relies on harvesters to be organized or accept organization	Trained or certified ecologically-sensitive harvesters
Organic Certification	Pesticide-free standards; organic-processing guidance	Single species orientation; weak forestry and ecosystem standards	Pesticide-free herbs
FairTrade Certification	Assures fair wages and good working conditions	Mainly focused on high volume/high value agricultural commodities	Equitable trade with producers, fair labor conditions
Ecological Certification	Forest ecosystem assessments	No attention to processing or manufacturing stages of production	Sustainable forestry and harvesting, healthy forest ecosystems
Good Agricultural and Collection Practices	Proper sanitation and handling of herbs	Little to no ecological or social criteria for sourcing of herbs	Contaminant-free starter materials
Good Manufacturing Practices	Standards for appropriate facilities and trained personnel	No attention to sourcing issues	Clean and safe manufacturing
Methods Validation Programs	Standards for proper preparation of botanical remedies	Overlooks sourcing issues, variable standards and applications	Botanical medicines produced by standardized methods

Source: Shanley et al.2006

How to Get Forest Certification?

1. Consider whether you plan to sell your products to international markets – if the products are for subsistence use or only local sales, certification could not be viable (as in most developing country situations)
2. Discuss within the CFUGC and CFUG general assembly how certification is essential or add value to the existing forest management
3. Consult relevant agencies (such as ANSAB in Nepal) or BDS service providers on how the incremental costs of certification can be recovered with possible revenue increases, or can be subsidized under some external help?
4. Explore whether there are other groups interested to get involved in some 'group certification' scheme in order to reduce unit cost of certification.

Checklist of certification process

1. Application
2. Scoping visits
3. Inspection–assessment
4. Report preparation
5. Peer review
6. Certification decision
7. Annual audit

5. Choose the kind of certification scheme you need to promote your products, and identify the agencies (such as Forest Stewardship Council)
6. Contact and consult the certifying body, such as Rainforest Alliance's SmartWood Asia-Pacific Office in Bali, Indonesia, if you consider FSC certification schemes (The certification body should be a credible and well accepted by the markets. The other process involves an initial assessment of your operations.)

Cost of the certification

The cost of the certification may vary based on size and complexity of the operation. Fees are charged by the certification bodies for their services. For example FSC charges a fee to the certification bodies to cover the costs of its accreditation services. In order to obtain a cost estimate, companies and organizations should contact an accredited certification body.

7. Enter into agreement with the certifying body or their representatives, and follow as agreed. (The actual certification evaluation will involve a visit to the forest or company/CFUG and a review of the procedures and documentation before a certification decision is made.)
8. Take up suggestions of the auditors, and carry out audits annually.
9. Get inputs from certifying body to project your products internationally.

3.7 INTEGRATE RESOURCE MANAGEMENT TO LANDSCAPE/ CLUSTER LEVEL

In certain CFUGs the resource management objectives could be better achieved through integration of management actions to wider spatial scale- especially by coordinating with neighboring groups. It involves coordination and joint planning of a number of groups in a landscape or cluster.

Generally this function is supported or facilitated by support organizations, NGOs government agencies. However individual CFUGs can also initiate this to a certain extent.

There are three key considerations: (a) Why landscape level coordination? (b) Who should initiate landscape level coordination? And (c) How to do it?

Why landscape level coordination?

This exercise serves several objectives that it is difficult or impossible for a single group to achieve on its own:

- It serves as a consolidated production-cum-management cluster for certain products having unique product qualities or competitive advantage. The coordination among neighboring groups ensures production in large quantities, pool together skills and technologies and marketing jointly to benefit all members.
- It allows sharing of knowledge and skills among neighboring groups for both resource management and enterprise planning and operation.
- It helps consolidation of raw materials supply- balances out raw materials production fluctuations at particular group.
- It increases enterprise success: avail establishment funds, produce in large quantities, reduce marketing costs, etc.
- It helps conservation of endemic or endangered plants/animals. The groups can jointly take measures for conservation, e.g. by enforcing common rules, making wildlife corridors, conserving certain ecosystem types, etc.

Who should initiate landscape level coordination:

The purpose of management integration at the landscape level defines who should initiate this. Service provider agencies can initiate this, and leave to CFUGs to follow it up on their own. The CFUG federation can also play a role in starting this process.

How to do it?

Depending on the purpose of this exercise, the actual procedures vary. The general process includes:

1. Organize a meeting of representatives of CFUGs within a landscape or cluster
2. Discuss on how their joint actions can promote conservation or enterprise success
3. Allow all representatives to discuss in their respective CFUGs to explore and discuss on opportunities/actions that could be achieved through such cluster level initiative
4. Hold another round of meeting- distill the points into a tentative action plan
5. Refine the purpose, and develop detailed action plans, and outline responsibilities for each member CFUGs
6. Operate it either as a formal entity, or as informal one- as per decision of the members
7. Continuously review whether this initiative is relevant (ie, in the interest of CFUGs), identify what improvements can be made, and plan for new opportunities.

4 DEVELOP AND IMPLEMENT COMMUNITY-BASED NATURAL PRODUCTS ENTERPRISE PLAN

In this chapter, you will have insights of the process of developing and implementing Community-based natural products enterprise (CBNPE) plans. Simply put, enterprises refer to a set of organized activities for making a living. CBNPEs constitute an important element of community-based natural resource management (CBNRM), and are specifically focused on doing business on natural products. To look for how to do it, this is the chapter for you.

Going through this chapter you will have important insights of the process, methods and tools to develop and implement a business plan for CBNPEs. Go to Section 1.4 of Chapter 1 for the process of organizing CBNPE entities- that is essential before starting the business. The flow chart of this chapter is shown in the figure.

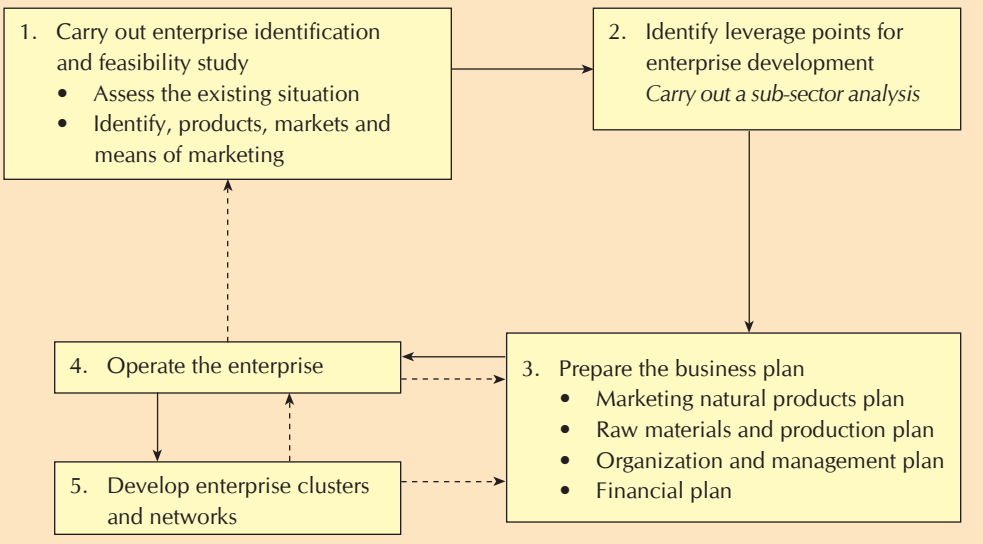
Why natural products enterprises?

Community-based natural products enterprises (CBNPEs) for their environmental, social and economic functions.

Environmentally, the development of natural product enterprises can reduce threats to biodiversity by providing alternative income sources from the natural forest.

Socially, rural populations living near the forest use natural products for their livelihood.

Economically, market growth for natural products in local and export markets generates interest in policy initiatives that support sustainable economic growth.



Note: Regular lines represent usual flow, while dotted lines represent feedback.

4.1 CARRY OUT ENTERPRISE IDENTIFICATION AND FEASIBILITY STUDY

Enterprise identification and feasibility study is crucial to develop a successful community-based natural product enterprise. Market Analysis and Development Manual (FAO, 2000) provides a step-by-step process for this. Sub-sector study helps a lot to identify the appropriate point of intervention in any sub-sector. Together these will help to identify better enterprise options and understanding of the market.

Common characteristics of natural products enterprises

- Use renewable natural resources
- Raw materials found in remote locations; transport costs could become an issue
- Raw materials are seasonal
- Large number of collectors/suppliers with small quantity of raw materials
- Difficult to maintain consistent quality and quantity of products
- Competition from illegal activities results in pricing information and distribution distortions

The following presents the steps (Sub-sections 4.1.1 and 4.1.2 are adapted from FAO, 2002 MA&D Manual).

4.1.1 Assess the existing situation

This exercise helps understand the livelihood strategies, define the problems and opportunities, and shortlist a range of natural products.

- Identify the target group with which you will be working [Also See Chapter 1]
- Determine the financial objectives of the target group through a discussion with group members
- Prepare a list existing natural resources and products
- Identify key constraints as well as opportunities of the existing market system
- Shortlist a range of products
- Raise awareness of the benefits of working together among the target group members.

Outputs of this exercise:

- A shortlist of products that will be evaluated subsequently
- Understanding of the social, environmental and technical constraints of a range of products
- Formation of a team of target group members to undertake subsequent activities

4.1.2 Identify products, markets and means of marketing

This exercise helps gather information for analyzing the feasibility of the short listed products and decide on the most viable enterprises which can be developed during the period of your organization's support. Conduct the following activities:

- Analyze the four areas of enterprise development (market, environment, social/institutional and technology)
- Select the most promising products
- Create interest groups for the selected products

Outputs of this exercise

- Identification of the most promising products and gathering of information for the design of business plans
- Formation of interest groups for the selected products who will undertake the activities in Phase

Tools for Enterprise Identification and Feasibility Study:

- Elimination and short listing of products (MA&D)
- Feasibility studies and product selection based on four areas (MA&D)
- Sub-sector study (GEMENI/ Enterprise Development manual, ANSAB/EWW)
- Product flow (value chain) mapping (Enterprise Development manual, ANSAB/EWW)

4.2 IDENTIFY LEVERAGE POINTS FOR ENTERPRISE DEVELOPMENT: CARRY OUT A SUB-SECTOR ANALYSIS

The 'sub-sector analysis' helps to identify leverage points- that indicate the strategic actions which enhance profitability and benefits to the target groups and is useful to the entrepreneur to understand the dynamics that will affect the targeted enterprise activity. For this you need a 'Fuction, Participants and Technology Chart' (See ANSAB/EWW, 2000 Enterprise Development for Natural Products Manual). Go through the following steps:

STEP 1: List all the functions or activities involved in the selected natural product enterprise.
Define the end market. For example, Jatamansi essential oil can be processed into cosmetics and perfumes for export markets in India and Europe. Visualize what happens to the natural product from the time it grows in the forest and is harvested until the time it reaches a user (downstream processor or manufacturer) or final consumer in some processed form. These are the functions and should be listed on the left-hand side of the chart.

STEP 2: List all the actors or participants involved in the natural product activity
Think about who performs each function. List all the actors along the row at the top of the chart.

STEP 3: List all technologies (interventions) required to do each function.
Look at each function listed on the left-hand side of the chart. What is required to be able to complete each function, e.g. a certain type of equipment, working capital, some sort of skill or particular knowledge, etc. List these items on the right hand side of the chart. This list helps to identify potential intervention in the natural product value chain.

STEP 4: Identify the functions for each participant.
After completing steps 1-3, look at each function and identify which participants are doing what function and shade boxes appropriately. This step shows who is doing what, where the potential competition is and who the potential allies are in the enterprise.

4.3 PREPARE THE BUSINESS PLAN

After identification and feasibility study, the next stage for enterprise development is to prepare a business plan for the proposed enterprise. The process of the preparation of business plan needs to involve the target groups throughout so that they understand its components and implement it smoothly. There are five main components of the business plan (see Box). The business plan is essential for attracting financing, managing operations efficiently, and integrating all enterprise functions so that profits can be made while conserving the resource base.

First let us consider the five major components of the business plan, and then to assemble them to prepare the plan.

Components of business plan

- Marketing of natural products
- Raw material and production
- Organization and management
- Financial management
- (secondary component) Policy and regulatory environment

4.3.1 Component 1: Natural products marketing plan

The first component of the business plan targets at meeting buyers' requirements. Marketing plan includes aspects that are important to ensure marketability of the products and is crucial for the success of a natural products enterprise.

Market information

Market information is a critical component of natural products enterprises, especially when purchase agreement or wholesaling are not common practices. The enterprises have to get market information for raw material purchase, processing and sale of their products. With such information, they can adjust production, purchase or sales in order to optimize profit.

Refer to the following table, and search information and explore solutions and strategies with target group (enterprise) members. This component will eventually be integrated into the business plan as other components are put together.

Sub-components under Marketing Plan	Description of the sub-components
1. Description of the Product	**What is the product or service?** Description of the product includes size, color, shape, product features, uses and benefits and the range of products to be offered. It is important to know that whether the product is a new or exist in the market. Market research informs about the preference of customers on the product.
2. Comparison of the Product with its Competitors	**How does it compare in quality and price with its competitors?** SWOT (Strength, weakness, opportunity and threat) analysis helps to analyze competitiveness.
3. Target Market / Market Area	**What geographical areas will be covered by the enterprise?** This depends on the nature of the product; how well it allows itself to transport and distribution; the size of the market in different localities; the presence of strong competitors in the areas **Within the market area, to whom will the business sell its products?** This could be a specific target group or market segments among the population.
4. Pricing & Conditions	**Costing:** How much does it cost to make the product, or to deliver the service? **Selling price:** To determine selling price start by estimating consumption, usage or sales of the product per head of the population in your market area, differentiate wholesale price, retail price and develop credit terms. There are some methods to determine selling price. **a. Cost plus method** (cost - based pricing): real product costs + x % (also known as mark-up or profit margin) **b. Comparative method** (competitor-based pricing): What does the competitor charge? **c. What the market will bear method** (Market-based pricing): What is the client willing or able to pay?
5. Channel of Distribution	**Where do customers find your product?** This could be shop(s), website, wholesalers, agents, retail outlets
6. Promotion of the product	**What types of activities are required to boost the sales of the product?** This could be various types of promotional activities including advertisement in print and electronic media, marketing campaign, sales scheme etc
7. Marketing Strategy	Marketing strategy is a mix of a plans considering above mentioned marketing aspects. This could be price strategy, promotional strategy, product strategy, customer targeting strategy and mix of these all strategy.

Some tools useful for marketing component:

- Sales Forecast table
- Marketing Cost table
- 5 Ps of marketing

4.3.2 Component 2: Raw materials sourcing and production plan

The next component business development plan includes raw material sourcing and production. This is linked to the sustainability of raw materials and production plan of enterprise.

This component has two principal sub-components: sustainable supply of raw materials, and

A. Ensure sustainable supply of raw materials

For the sustainability of raw materials supply, each enterprise should have a strong linkage with a CBNRM groups- that have a scheme of sustainable harvest of natural products. When existing resource stock is insufficient to meet raw materials demand, two apparent options exist: (a) promote the existing CBNRM groups to actively manage/enrich the resource (e.g., by planting the desired species) and increase productivity, and (b) bring in more CBNRM groups to supply raw materials. Developing an enterprise on a product that is already in traded is often less risky because the community already has knowledge on the condition and supply of the product than for a product not sold previously.

Go to Chapter 3 on harvesting of natural products, and follow the following to determine sustainable sourcing of raw materials:

Steps to determine sustainable sourcing of raw materials

1. Identify the CBNRM groups that can potentially supply raw materials to the enterprise
2. Identify the resource supply areas of the product(s) from the maps in the community forest OPs.
3. Estimate the supply volume based on current harvesting prescriptions.
4. Identify current or potential threats to the resource base. Conduct group meetings and inquire where and how the product has been collected in the last three years. Rank threats. Gather data over several years, as there can be substantial year to year variations.
5. Make a preliminary estimate of a sustainable level of supply. If the supply quantity is insufficient, either ask for more active management (e.g., planting seedlings of the needed species to be harvested in some future time) or include more groups as raw materials suppliers.
6. Monitor the supply situation and adapt your sourcing strategy over time.
7. Remember that sustainable harvesting involves more than the amount harvested. Sustainability is determined by how and when the plant is harvested and all other impacts on the ecosystem.

B. Develop a production plan

Production planning is essential to establish a production facility on the ground and to minimize the per unit production cost. It includes such aspects as plant location, production system, environmental and social considerations and technology (processing method and technology). Look for enterprises that are using some cost-efficient technology and performing well, so that such technology can be purchased.

Refer to the table below to look into a number of key factors and explore answers to important questions.

Factors	Key questions
Enterprise/ plant location	• Where will the plant be located? • Is it far from people and raw materials? What about transportation cost? • Is there required facility (such as water, fuel and power etc)? • How the plant space is going to be laid out? (Draw the plant map and plant layout if possible) • Number of days/year that the enterprise will operate, and downtime for plant maintenance and repairs?
Production System	• What are major raw materials and supporting materials? • Are they available throughout the year? • What are the production risks? How to prevent? • What is the cost of raw and supporting materials, including packaging? • Where are the suppliers of these inputs? • What is the input-output ratio or conversion ratio? • How difficult is it to maintain an acceptable product quality? • What are the quality control procedures in the enterprise? • Can the enterprise generate required profits with the fixed investment cost associated with the technology choice? • What is the break-even point? How easy to achieve the BEP? • Is there any room for increasing the production level if demand increases? • How easily the required skills and capacities and other BDS available or is training needed to run the enterprise?

Factors	Key questions
Environmental & Social considerations	• What are the effects of the enterprise on environment? • How to prevent its harmful effects? • How to promote environmentally sustainable enterprise development? • What and how much benefits people involved in the enterprise receive? • What are the impacts on the general public from the enterprise?
Technology (processing method and technology)	• What equipment and procedures will be used to produce the given product? • Is there any new technology available? • Does the enterprise need any specific technology? What are they? • Are the technologies acceptable to the buyer? • How expensive are these technology? Is it affordable to the entrepreneurs? • How sophisticated are these technologies and are communities capable for maintenance? • What is the production capacity of the technology? • What are the impacts of the technologies on environment? • What kinds of mitigation measures are required to counter impacts? and how costly are these measures?

Tools:

To draw up a production scheme, you will find the following tools and methods useful:

A. Calculation of Fixed Assets

Fix assets include land, building, machinery, furniture and vehicle required for an enterprise. Fix assets are not consumed in every unit of production. Total cost of fixed asset when dived by the age of the asset is called Depreciation. Profit calculated after subtracting deprecation is only a net profit.

B. Calculation of Cost of Goods Sold

The cost of goods sold or the production cost consist of variable cost and fixed cost.

Variable costs: The costs which change with the level of production. These include raw materials, direct labor cost and variable factory cost.

Fixed costs: The costs which do not change with the level of production. These include indirect labor cost, fixed factory cost, etc.

C. Tables for calculation of raw material.

The following table helps to calculate raw materials cost per unit of final product. This cost will further analyzed in financial plan.

No.	Item(s) To produce ..... unit(s) of product: X	Quantity (unit)	Cost/unit	Total
1				
2				
			Total raw material	
			Raw materials cost per unit (b ÷	

Total raw material cost

Product(s)	Month												Total
	Raw materials	1	2	3	4	5	6	7	8	9	10	11	12	
Product: X	Cost/unit *													
	Quantity													
	RM Amount													

4.3.3 Component 3: Organization and management plan

Organization and management plan is the third component of the business plan of a community-based natural product enterprise. It includes three key elements: (a) organization and staffing, (b) entrepreneurs' profile, and (c) enterprise management.

A. Organization and staffing

For the success of an enterprise its organization and staffing has to be clear from the beginning, and the skills and experience required for key positions have to be assessed properly. Consider the following:

- Organizational structure: It includes structure of authority and responsibility (line of command) and division of labor. Visualize the various functions of the enterprise (marketing, production, organization and management and finance) to a sufficient detail and develop an organization chart.
- Staffing: It includes the process of hiring employees (including preference to local people, ethnic minorities or women), management of staff, terms of reference, job contracts, staff training.

B. Entrepreneurs' profile

Entrepreneur's profile exhibits the competence the enterprise and helps plan for enterprise competitiveness. It is considered as important information for a business plan. For the survival and

growth of the enterprise, the entrepreneurs must have proper qualification and experiences. However, if the entrepreneurs are new to the natural products sector, or are not themselves qualified and experienced enough in the business, a suitably competent management team has to fill the void. For this include the highlights of the bio-data of the main shareholders and other key personnel in business plan.

C. Enterprise management

Efficient and competent enterprise management is the key to enterprise success. It is critical to handle and integrate core enterprise functions, such as production, raw material supply, marketing and financing. The enterprise need to evolve and continuously improve its management over time. Use the following checklist to include in the business plan a system so as to ensure that key functions are taken care of and handled by the management.

Enterprise Management Checklist

- How many and what types (skills, education, experience) of personnel are needed?
- Is local talent sufficient to run the enterprise or is an outside manager and technical staff required? How will extra staff be selected?
- Is training (processing, bookkeeping and accounting, marketing, company management) needed? If so, where can staff be trained?
- What will be the enterprise management structure and who in the group will decide this and oversee management?
- Who will set-up the financial and administrative systems and maintain the books for the enterprise?
- Are there labor surpluses or shortages in the area? If there are labor surpluses do these correspond with the enterprise's seasonal labor demands?
- Are decisions being made on a business basis? For example, a low priced or donated plot of land may not be a good deal if it lacks access to the required infrastructure. Also consider climate; will the area be flooded when rainy? too hot in the summer? too cold in the winter?
- How many days per year will the enterprise operate? Is this consistent with raw material supplies, market demands, and local work habits?
- How will the employees be compensated for their work? Monthly salary basis, output basis, onuses?
- How will enterprise monitoring and supervision be carried out? How will employees be motivated for best results?

Source: ANSAB/EWW 2000

Tools: The tools/methods required to develop the organization and management plan include calculations of (a) pre-operating cost, and (b) fixed costs of organization and management.

- **Pre-operating cost:**

It is the cost which is incurred prior to the operation of enterprise. This includes registration cost, trial production cost, and staff training cost. In a certain interval of time, some of these costs have to be planned. Therefore an annual amortization cost calculated by dividing total pre-operating cost by a year of computation. This has to be deducted to get net profit. Consider the following example of Malika Handmade Paper Enterprise.

Items	Total Amount
a. Registration	12,000.00
b. Technician fee (installment of plant, short training)	4,000.00
c. Debugging and trial expenses	
i. Worker (trial production)	1,000.00
ii. Raw material-trial (Lokta, caustic soda)	500.00
iii. Installation of beater machine	1,000.00
d. Contingency	1,000.00
Total pre-operating expenses	**19,500.00**
Year of computation	**5**
Annual amortization	**3900**

- **Fixed costs for organization and management**

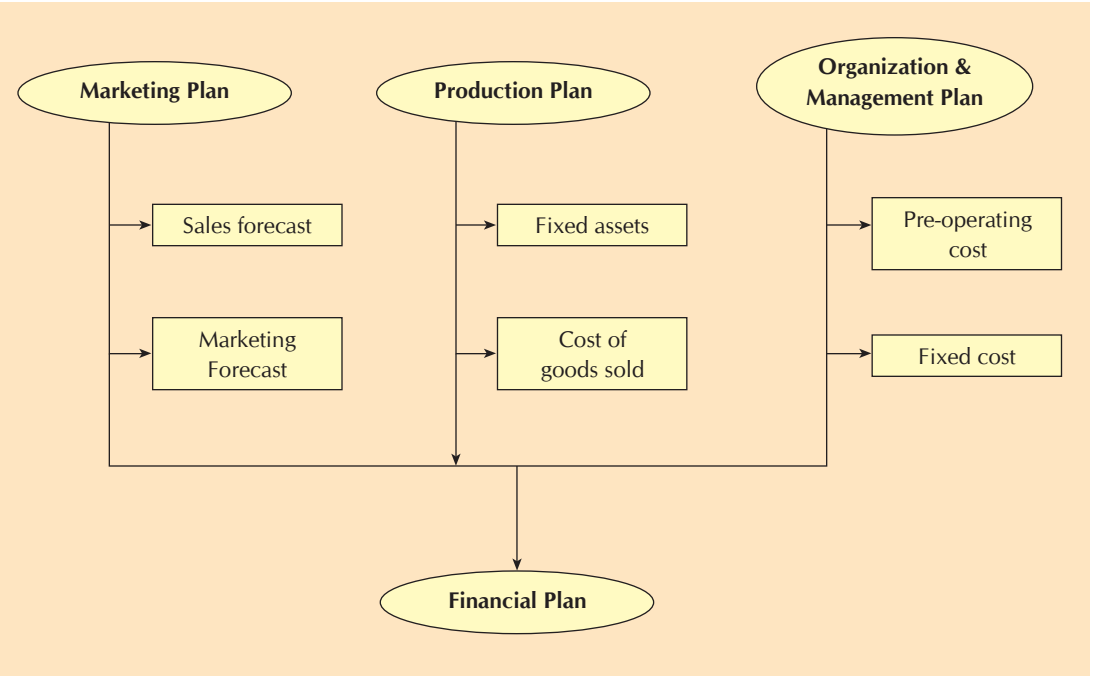
Fixed costs include some type of fixed cost in production and some fixed cost in organization and management. For the ease of financial plan, both fixed costs can be calculated in one Fixed Cost table. Consider the example of a fixed cost table from Malika Handmade Paper Enterprise.

Items	Amount
Fixed manpower expenses	79,300
Indirect sales expenses (marketing)	15,000
Miscellaneous office expenses (office supply)	8,000
Replacement & maintenance (60%)	12,000
Auditing fee	10,000
Total Fixed Cost	**124,300**

4.3.4 Component 4: Financial plan

Financial plan includes projected financial statements of an enterprise. Cost and revenues calculated in marketing plan, production plan and organization and management plans are further analyzed in this plan. It also projects a timeframe for the enterprise's breakeven point and quantifies the return on investments and payback period. Financial statements are the key to monitor the fiscal health of the enterprise and provide a basis for a good and simple bookkeeping system. It also includes measures to guard against the misuse of funds.

The components of the financial plan are given in the figure.



Methods and tools

These are the analyses and calculations needed for the financial plan. These include the following, and the details on each of them follow subsequently.

(a) Total project cost,
(b) Securing capital, loans and interests
(c) Profit and loss statement
(d) Cash flow statement
(e) Break-even point (BEP)
(f) Return on investment (ROI)

A. Total Project Cost

Total project cost or total investment requirement is calculated on the basis of minimum required amount of capital to start the business. This includes all fixed assets expenses, pre-operating costs, fixed cost, and operating expenses. Following is an example of Malika Handmade paper enterprise on calculation of total project cost.

B. Securing capital and loans

After calculation of initial capital requirement, the decision has to be made on the equity (share) contribution from each the entrepreneurs and the amount of loan required. If communities are going to invest, it can be beneficial to them to collaborate with existing entrepreneurs to get experience and a good leadership. Equity structure depends on the enterprise modality (refer to Section 1.4 of Chapter 1 for the decision on enterprise modality), so are options for accessing loans or any external support in the form of grants or privileges. So this component needs to be fed by a review of existing government regulations on companies, cooperatives, and an assessment of the availability of loan and other forms of support financial institutions, projects or government bodies.

Cost Headings (initial requirement in bracket)	Initial capital requirement	Total Annual expenses
1. Total fixed assets expenses	**352,600**	**352,600**
2. Total pre-operating expenses	**19,500**	**19,500.00**
3. Annual fixed cost	**48,283**	**146,300**
a. Marketing expenses (50% of total)	7,500	15,000
b. Replacement and maintenance expenses(50% of total)	10,000	20,000
c. Office supplies (50% of total)	4,000	8,000
d. Man power (for 3 months)	26,783	93,300
e. Audit fee	10,000	10,000
4. Annual operating cost	**848,722**	**1,989,578**
a. Man power (for 3 months)	98,317	370,400
b. Raw material (for 4 full working months stock)	461,100	922,200
c. Selling expenses (for 3 month products)	140,940	375,840
d. Fuel wood (for 100 full working days stock)	61,021	146,450
e. Supporting chemical (for 4 full months stock)	79,344	158,688
f. Packaging expenses (50% of total)	8,000	16,000
Total initial capital requirement	**897,005**	**2,111,878**

C. Profit and Loss Statement

Profit and loss statement (or Income Statement) is a summary of revenues and costs of an enterprise, calculated for a specific time period. This shows whether the enterprise is likely to be profitable. A template for the Income Statement of an enterprise is given below.

**Heading\ Months-----> **	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**Total**
Sales revenue (a)													
Variable cost of goods sold:													
Raw material													
Supporting chemical													
Fuel wood													
Direct labor													
Variable cost of goods sold (at factory) (b)													
Gross contribution margin: C = (a-b)													
Packaging expenses													
Maintenance and replacement (40%)													
Selling expenses (KTM sale)													
Total variable expenses (d)													
Net contribution margin: e = (c-d)													
Fixed operating expenses:													
Fixed manpower expenses													
Indirect sales expenses (marketing)													
Miscellaneous office expenses (office supply)													
Replacement & maintenance (60%)													
Auditing fee													
Total fixed expenses except depreciation (f)													
Income before depreciation and tax: g = (e-f)													
Depreciation and amortization (h)													
Income after depreciation: i = (g-h)													
Accumulated retained earning	Sum (i) of every month/year												

D. Cash Flow Statement

A cash-flow statement provides the cash forecast that an enterprise anticipates receiving and disbursing cash during a given span of time (generally a month). It enables the enterprise to manage cash in a way to avoid excessive cash deposit and to deal with situations of cash crisis. It is useful to harmonize cash flow statement to that of income statement in terms of time period. Please note that the ending cash balance (the bottom line of a cash flow projection statement) can not be negative, because it means the project have not enough cash to pay the expenses.

The following table provides a template for cash flow projection statement.

Items	Pre-Operation	Month												Total
		1	2	3	4	5	6	7	8	9	10	11	12	
Cash Inflows Sales														
Other Income														
Total Cash Inflows(a)														
Cash Outflows Cash Flows for current assets														
Raw materials														
Labors Cost														
Factory Expenses														
Fixed costs														
Marketing costs														
Income Taxes														
Other current assets														
Cash Flows for Fixed asset and other investment														
Land														
Building & Construction														
Machineries and Equipments														
Vehicles														
Office Equipments														
Pre-Operating costs														
Total Cash Outflows (b)														
Net Cash Flows (d) = (a)-(b)														
(+) Opening Cash														
Total Cash														
(+) Cash received from issuing ordinary shares														
(+) Proceeds from long-term loans														
(-) Repayment of long-term loans														
(-) Interest expenses														
Year-end Cash														

E. Break-even point (BEP)

Break-even analysis provides information on the sale the enterprise must ensure to cover its costs. A 'break-even point (BEP)' refers to a volume of sales at which total costs equal total revenues. Thus the enterprise must operate either on or above the BEP: it can make profit only when its sales revenue is greater than that at the BEP. Thus the BEP is a very important Break-even point analysis is equally important for any type of enterprise. The following table provides an example of calculation of BEP for an enterprise.

Items	Amount
(1) Sales	2,349,000
(2) Variable costs	2,009,578
(3) Fixed Costs	124,300
(4) Exceed profit = (1) – (2)	339,422
(5) Exceed profit ratio = (4) / (1)	0.14
(6) Break-even point in sales = (3) fixed costs / (5)exceed profit ratio	887,857

F. Return on Investment (ROI)

The return on investment (ROI) refers to the percentage of an enterprise's profit before interest and taxes to its total investment. ROI allows the entrepreneurs or the enterprise management to examine the profitability of a project or to compare profitability of different projects. Projects with higher ROI are more profitable than those with lower ROI.

The following formula is used to calculate the ROI.

$$ROI = \frac{\text{Profit before interest and taxes}}{\text{Total Investment}} \times 100$$

4.3.5 Component 5: Policy and regulatory environment

The policy and regulatory environment comprise the fifth, yet a secondary, component of a business plan. It is secondary because it is generally taken as given for an enterprise and can only be 'factored into' the business plan. With the insight on this the enterprise can better plan and adjust its operations when existing policy/laws continue to persist or change over time. Important policy/regulatory considerations include the various formal and informal policies on access to resource, forestry laws, incorporation options, investment codes, pricing legislation, labor regulations, tariffs, interest rate ceilings, import and export procedures and taxes regulations.

The table below provides a glimpse of the effect of policy/regulations in a simple value chain- a pathway on which a product moves from primary production to the end consumer. The business plan should stipulate the possible effects of policy/regulations on the proposed enterprise, devise contingency strategies to deal with changes in these policies, and plan activities accordingly.

Effect of Policy and Regulations in the Value Chain

General steps of value chain	How the regulatory environment can affect an enterprise
Harvesting and management of natural products ⇩	Land and resource tenure; access to natural products; existing harvesting seasons and methods; resource management system. **For example:** District Forest Officer (DFO) provides collection license to collectors. A Community Forest User Group (CFUG) can gain management responsibilities and user rights for natural

General steps of value chain	How the regulatory environment can affect an enterprise
	resources under community forestry provisions. A CFUG can exclude nonmembers from using and harvesting resources from a community forest.
Processing ⇩	Enterprise registration, processing license, labor regulations, technology access, taxes, financial support. F**or example:** Forest based industries are not allowed within 3 km (in hills) and 5 km (in Tarai) of forests. Natural product processing enterprises can obtain an income tax holiday for up to 10 years. Financial support is available though the agricultural development bank.
Trade and Marketing	Release and export permits, export and import procedures and duties, market information. **For example:** DFO provides Release Order for natural product from a district. Nepal Chamber of Commerce (NCC) or Federation of Nepalese Chambers of Commerce and Industry (FNCCI) provide Certificate of Origin to the manufacturer or exporter of natural product.

4.3.6 Put all components together into the business plan

When assembled together, five major components of an enterprise (See earlier sections of this chapter) constitute a business plan. The plan provides a basis of running the enterprise and monitoring its performance and growth over time. It is also essential to attract financing, manage its operations efficiently, and integrate all enterprise functions. A good business plan enables the entrepreneurs make the right decisions in right time and help them realize the enterprise objectives.

Purpose of Business plan

- Describe details of the project, which help entrepreneur to set up clear goals
- Plan steps, set priorities, allocate resources, and plan cash flow
- Estimate the raw materials required
- Clearly communicate with management team, banks, financial institutes or other investors
- Apply for a business loan
- Reduce the risk of the investment and to be decision-making tool
- Function as blueprint for financing activities, investing activities and operating activities.

Business plan components

A business plan has four key components and the fifth component (policy and regulatory environment) is inbuilt into them:

- Marketing plan
- Production plan
- Organization and management plan
- Financial Plan

To prepare a business plan:

- Collect, summarize and analyze all the necessary primary and secondary information and specific data about the project (see earlier sections of this chapter),
- Organize the information and data to fit to the content of the business plan (see table below).
- Harmonize all components/parts of the business plan
- Prepare the draft and get approved from the executive committee (Board, etc).

CONTENT OF THE BUSINESS PLAN

CONTENT	DETAILS
Entrepreneurs Profile	• Brief description of entrepreneurs capability and experience on the sector
Executive Summary	• Summarizes all the main elements of the business plan in one to two pages
Background and Overall Goals of the Enterprise	• Background on rationale for the enterprise, present situation, how the enterprise will change the situation
Marketing Plan	• Summary of market research • Description of the Product (specifications and quality control) • Comparison of the Product with its Competitors' • Target Market / Market Area • Pricing & Conditions • Place / Channel of Distribution • Marketing Strategy • Sales Forecast/target and sales plan • Marketing Cost
Production Plan	• Enterprise description/plant location • Production System (technology, skills level, equipment, infrastructure, fuel, supplies) • Production capacity (raw materials needed and capacity of processing equipment) • Raw material collection and supply • Environmental & Social Plan • Technological Plan • Fixed Assets for Production activities • Cost of Goods Sold
Organization and management plan	• Legal status, organizational and ownership structure • Interface with regulatory bodies • Organization chart (Management team/board of directors, manager(s), skilled personnel) • Number of employees and duties, qualification for each position in enterprise, and compensation structure • Employee training and technical assistance planned • Relationship with stakeholders (collectors, suppliers, tenure holders, traders, regulatory institutions) • Interface with community and distribution of enterprise benefits Pre-operating cost • Fixed costs
Financial Plan	• Total Project Cost and initial capital requirement • Repayment of Long-term Loans and Interests • Profit & Loss Statement • Cash Flow Statement • Break-even point • ROI (Return on Investment)
Risk Analysis	• Mention of major risks to the enterprise that are specific to the industry and geographic location
Sustainable Resource Management	• Sustainable harvesting guidelines • Mitigation of pollution from processing (if any) • Plan for biological monitoring and conservation enforcement • Compliance with forestry regulations
Enterprise Activities and Timeline	• List of major activities (with timeline) needed to launch enterprise and operate in years one and two

4.4 OPERATE THE ENTERPRISE

Operating or running an enterprise is basically to follow the actions stipulated in the business plan. However, the enterprise needs to be constantly maneuvering its operations as time passes on. Over time, several things change: market preference, raw materials supply, policy/regulatory environment, the people in the management, shareholders, prices, labor laws, technology, and so forth. Thus the success of the enterprise principally lies in its ability to manage and adapt to change. The actions outlined below are just indicative of some of the actions that enterprises need to follow:

- Start with the implementation of the business plan
- Institutionalize a flexible planning and operational system, with an ability to adjust operations as per change in policy/environment, market demand or the like.
- Search for new markets, greater sales in existing markets and negotiate greater prices for your products
- Build new business relationships
- Maintain and continue to improve your product quality, supply consistency and to establish your 'brand' in the market
- Get update of the market information
- Develop a rigorous system of accounts, internal audit and budgetary control
- Hire expert services (from BDS market) when the enterprise needs to improve its knowledge or skills base
- Develop enterprise clusters and networks to leverage enterprise functions (see next section).

Key success factor for natural product enterprises

- Raw materials availability
- Legal access to and control over the natural resources-
- Equitable distribution of benefits-
- Appropriate processing technology
- Good management
- Commercial sustainability
- Access to capital
- Available and accessible markets for the products

4.5 DEVELOP ENTERPRISE CLUSTERS AND NETWORKS

Developing enterprise networks or clusters help small enterprises to reduce costs in several enterprise functions. Networks vary in purpose, and so do their nature, structure, membership, organizational life, etc. Networks can be developed by similar enterprises- especially for jointly marketing their products to ensure higher prices (marketing function) and for raising their concerns collectively (in the form of association, such as Nepal Herbs and Herbal Products Association).

Example

Sustainable Biotrade Group comprises a number of natural products enterprises in Nepal. It is a group manager for chain-of-custody certification under the Forest Stewardship Council for its members. The Group members reduce substantial costs in ensuring conformity, documentation, internal audit, reporting requirements under the certification scheme. But they have the advantage of projecting their products as FSC certified ones.

Similarly different enterprises within the value chain can form alliances for stable business relationships (for example, local level producer cooperative, national level company (exporter) and an international company) can form an formal/informal alliance for mutual advantage.

At the local level, producer groups can network with similar other groups to get their produce (raw materials) sold to a nearby processing firm.

How networking helps establish and operate enterprises?

In Bajhang district of Nepal, several community forests have Lokta (Daphne sps), which is raw material to Nepali handmade paper. However, the amount of raw materials from a single CFUG is not enough to operate a handmade paper enterprise in a profitable manner. With a plan to establish and operate a handmade paper enterprise, Shree Binayak Pimi Danda CFUG collaborated with five neighboring CFUGs (viz., Binayak, Lahare, Ranada, Pari Ban and Tuki Dhanatoli).

The enterprise can now receive raw material from an area of 7863 hectares- combined for all these six community forests. It is owned and managed by 235 households of Shree Binayak Pimi Danda CFUG. These groups introduced a rotational Lokta harvesting schedule in their CF operational plans and 25% of the 961 households of the six CFUGs are involved in Lokta harvest. Its bark is processed into handmade paper and sold as a specialty product.

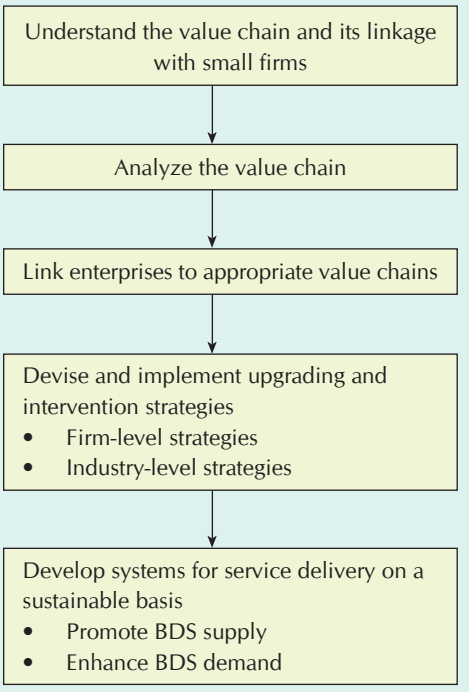
In the year 2003-04, the paper production was 1776 kg with total sales of NRs 599,400 (US $8,100). Though the profit in that year was nominal (Rs. 44,000), and so was the dividend to the shareholders (each household received NRs 30 to 570), the enterprise was able to create employment and market for raw materials.

Go to Section 1.5 of Chapter 1 for the process of facilitating network and alliances.

5 INTEGRATE COMMUNITY ENTERPRISES INTO VALUE CHAIN

Facilitation of community-based natural products enterprises (CBNPEs) per se does not guarantee that local communities get a due share of economic advantages. Such enterprises are often located in remote areas, that are characterized by limited market information, lack of networking and integration with the outside market, and limited availability of skilled human resources and improved technology. It is essential to overcome such challenges so as to generate equitable economic incentives and thereby to ensure sustainability of the natural resources.

In this chapter you will go through the multiple ways of linking the poor to economic growth opportunities through natural resource management and enterprise development. This chapter has two main elements:



Chapter Layout

(a) linking small and micro-scale CBNPEs to the industries, by having such CBNPEs become a part of the chain of activities in the industry and by making them competitive so that they offer opportunities to the poor to benefit from the growth; and

(b) developing a mechanism for accessing business development services (BDS)

This chapter will help you understand the process to use the value chain frame work in design your program/interventions and apply a BDS approach in developing supporting markets that can develop and strengthen the competitiveness of CBNPEs.

5.1 UNDERSTAND THE VALUE CHAIN AND ITS LINKAGES WITH SMALL FIRMS

A value chain is a supply chain made up of a series of market actors – from input suppliers to producers to processors to exporters and finally buyers – engaged in getting a product from its inception to the final stage. As the product market grows and more product and money flows up and down the chain, demand (derived) is generated, which is called supporting market. These supporting markets include sector-specific and cross-cutting financial and or business services. Finally, the chain operates in an enabling environment that can be global, national and or local.

The value chain describes the full range of activities that are required to bring a product from its conception to its end use and beyond. This includes activities such as design, production, marketing, distribution and support to the final consumer.

Linking Small Firms into Value Chains: An Economic Growth with Poverty Reduction Strategy, USAID.

The growth of value chains clarify some important concepts about how products and service markets grow. Product markets grow vertically before they grow horizontally. Without the capacity to get a product to market through the primary actors (input suppliers, producers, processors, wholesalers/exporters and finally retailers), industries are unable to generate sufficient income for investment in upgrading services, such as product development, training, and other business development services. Thus the vertical chain must be developed and strengthened before first-and/or subsequent tiers of service emerge.

To illustrate, in Nepal, BDS-MaPS Project (Business Development Services – Marketing and Production Services) worked in developing the NTFPs (non-timber forest products) sub-sector in remote and rural districts of Nepal. The project worked with rural producers to develop and strengthen the value chain for essential oils (Chamomile, Eucalyptus, Mentha) by providing technical assistance in setting up community groups, distillation enterprises and market linkages. At the same time, the project helped develop LRPs (Local Resource Persons), who were attracted to the enterprise groups due to the increase in economic activities, and they were trained to provide input supplies and business development services such as enterprise registration, market linkages, production techniques, maintenance of distillation units for these enterprise groups. At the same time, the project linked the enterprise groups with local private sector banks and through business plans developed by the LRPs, the enterprise groups were able to get bank financing for their units.

5.2 ANALYZE THE VALUE CHAIN

Analysis of the value chains allows you to understand the various components of the value chain. The framework for value chain analysis presented here at brief is meant to ensure both systematic and systemic analysis of the value chain and factors affecting its competitiveness. This provides you with the tools to understand the approach in developing competitive firms through the use of upgrading strategies. At this section you will also go through the various factors that affect value chain performance.

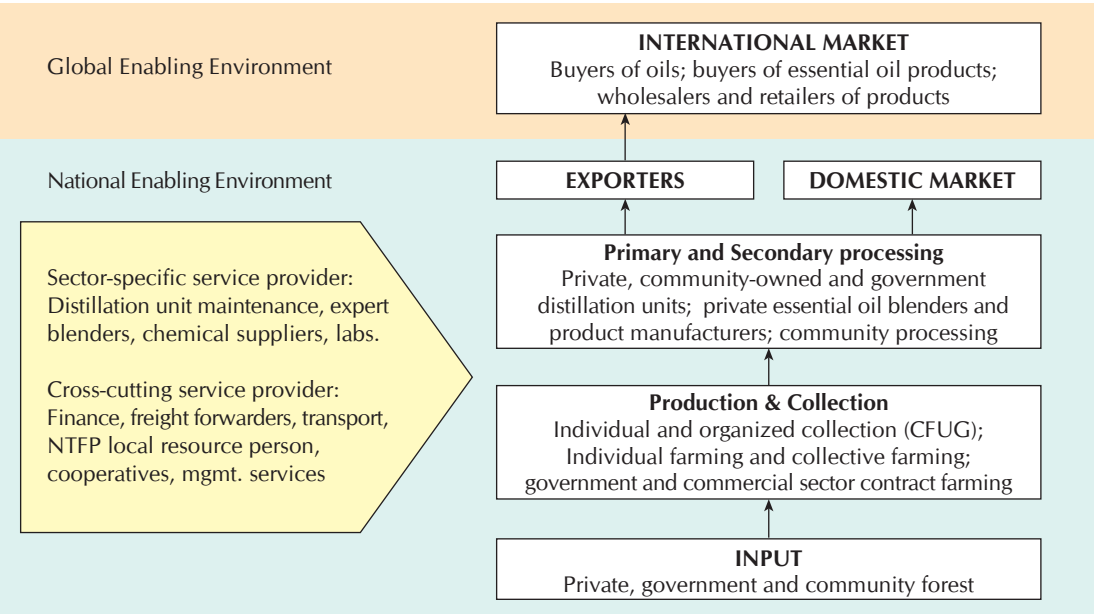


Figure 1: Value Chain Map of Essential Oil Sector in Nepal

To achieve demonstrable, significant results in poverty eradication, programs need to reach scale by stimulating markets to replicate promising practices on a sustainable basis. This can be done by:

- Strengthening learning systems and commercial support markets;
- Building the capacity of change agents to drive industry competitiveness. This includes an assessment of tangible constraints like access to finance as well as less tangible dynamics involving the nature of relationships and incentives that can equally constrain competitiveness.

Look at the factors affecting value chain competitiveness: (a) enabling environment, (b) end markets, (c) supporting markets, (d) inter-firm cooperation, and (e) upgrading. This will provide with key insights to subsequently devise and implement upgrading and intervention strategies.

1. Enabling Environment

One of the most critical external element influencing the competitiveness of the value chains are enabling environment. This consists mainly of international agreements and market standards; local, national and regional policies and legal and regulatory enforcement capacities. This environment creates systemic (dis)incentives that promote or inhibit private-sector participation and/or growth in the value chain. Furthermore, poor governance and enforcement of legal and regulatory regimes increase transaction costs, informality, commitment failure risks and, shortens business cycles limiting investments.

2. End markets

End markets for any industry or sector can be local, regional or global or all at the same time. Natural products value chains encompass a wide range of products and services, yet they have unique products with their niche market. The characteristics of the final product or service that drives demand represents the foundation upon which competitive advantage for any value chains are built on.

Go to Chapter 4 for greater detail on marketing.

3. Supporting markets

Supporting markets include finance and other sector and non-sector specific services and products that support the core product market, and are a key to firm-level upgrading. The demand of these markets are a function of the demand of the core product or are the derived demand from the core value chains.

4. Inter-firm cooperation

Inter-firm cooperation is either horizontal (between similar firms/ actors or same level actors) or vertical (between different value chain actors within the same value chain). The horizontal linkage among producers/ CBNPEs is needed to reduce the transaction costs. It helps small firms attain economies of scale, group together for advocacy and develop networks for cooperation. On the other hand, vertical linkages are critical for getting a product from inception to the market, and for transferring learning and embedded financial and business services from firms up the chain to firms down the chain or vice versa.

5. Upgrading

In firm-level upgrading (both product and process upgrading) firms improve their access to information, technology and capital or finance. This upgrading also includes product development and improvements in production techniques or processes. This improves the firm's competitiveness.

See Section 5.4 on upgrading strategies.

5.3 LINK CBNPES TO APPROPRIATE VALUE CHAINS

An important component to a value chain approach to economic development is to develop linkages of the CBNPEs to appropriate value chains. Here you will have insights on the approach and tools to determine the appropriateness of any value chain vis-à-vis the capacities of CBNPEs, interest of facilitators and governance and policy issues in the local context.

The choice and appropriateness of the value chains are determined by various factors which include the following key issues:

- **Growth potential:** This includes the evidence of market demand and growth potential; match between local capacities and nature of competitive advantage; opportunities for linkages; government or donor interest and existing program support.
- **Ability to achieve scale of results/ impacts:** In order to maximize program efficiency and impact it is imperative to look into the scale of industry/ value chains. The factors to consider here are number of CBNPEs; potential for upgrading; potential for broader and deeper increases in income and wealth and potential for employment creation.
- **Industry leadership:** To determine the industry leadership, factors such as willingness of lead firms to invest in industry growth, transparency of business transactions, commitment and willingness to work with other lead and non-lead firms to solve industry-wide problems are clear indicators of an industry with clear leadership potentials.

Aside from these factors, you need to look also at how the value chain can encompass broader goals for the project that would increase the benefits of the CBNPEs.

One key factor in selecting an appropriate value chain is to investigate if there are opportunities in the value chains for expanding the roles of the CBNPEs from mere collectors and producers to higher level value chain functions. The right value chain for CBNPEs would foster such a move and would provide incentives to CBNPEs, through increased monetary gains, to move up the chain.

There are many evidences that those value chains that promote win-win situation amongst value chain actors, foster learning and innovation and expand the depth and breadth of benefits for CBFEs are generally more competitive and rewarding. These value chains provide a long-term sustainable path to economic development for CBNPEs.

Case 1: Dabur Nepal and Medicinal plant value chain in Nepal

Nepal's BDS-MaPS project designed a value chain and BDS approach to work with the local communities in developing and strengthening value chains for locally available medicinal plants.

At its first phase, the project developed the capacity of local communities to develop into community-based forest enterprises (CBFEs). The activities included MECD (Micro Enterprise Creation & Development) trainings that led to the formation of groups within the CFUGs (Community Forest Users Group) to manage small scale production and harvesting of NTFPs. The project facilitated extensive sub sector analysis, which resulted in the cultivation of Asparagus racemosus, an important medicinal herb, for marketing purpose. The private sector "hook" was supplied by Dabur Nepal – a subsidiary of Dabur India, one of South Asia's largest manufacturers of natural products and supplements. Dabur provided technical know-how and subsidized seedlings, and had buy-back agreements with producers for the final products, which have a huge demand in the international market.

In the second phase, the project focused on developing sector-specific and non-sector- specific service providers to support the value chains. It worked with private banks and micro-finance institutes, and developed packages with them to provide financial and non-financial services to the communities, while developing the capacities of the service providers to service the communities effectively and efficiently. The project also supported the development of LRPs (Local Resource Persons) to provide technical service of harvesting and cultivation and to provide marketing assistance.

At the final phase, the project focused on developing strong networks between the various producer groups for economies of scale, advocacy and increased negotiation powers while working with various actors in the value chain to develop trust and a learning environment to make the chain more competitive.

5.4 DEVISE AND IMPLEMENT UPGRADING AND INTERVENTION STRATEGIES

Upgrading, both in terms of firm-level and industry level, refers to the needs of the firms/ industries to upgrade their products and processes so as to improve their competitiveness.

Guiding principles for value chain interventions

- Develop the competitiveness of the whole industry over time while assuring that growing numbers of CBNPEs contribute and benefit;
- Foster a reduced role for government, donors, and project implementers – who should act as market 'facilitators' rather than players – in combination with an expanded role for private firms in addressing industry constraints;
- Intervene appropriately to foster industry and firm capacity to resolve recurrent constraints on an on-going basis- by adhering to a sequencing of intervention options that first looks for "light touch" (i.e. interventions that mediate misunderstandings and link firms by acting as a moral guarantor) interventions and progressing to the last option which would be using project funds to buy-down excessive risks that are limiting critical transactions and linkages; and
- Increase the local capacity with a carefully planned exit strategy, so that impacts are sustainable.

Linking Small Firms into Value Chains: An Economic Growth with Poverty Reduction Strategy, USAID.

See the sections below for firm-level and industry-level upgrading strategies.

5.4.1 Firm level upgrading strategies

Firm level upgrading strategies include:

(a) Improved efficiency/ cost advantage

One of the ways for small firms to compete in appropriate value chains and increase the competitiveness of the value chain itself is to improve its efficiency and increase its cost effectiveness. This can be done in many ways from increasing its production efficiency through better technology to reducing costs and generating economies of scale through horizontal linkages and group coordination. However, it should be noted that cost competitiveness is only short lived and should not be taken as the only source of competitiveness.

How unique product characteristics enhance firm's competitiveness?

Aveda – a cosmetic and skin care wing of the cosmetic giant Estee Lauder in currently working in the hand-made paper value chain in Nepal. Aveda is promoting green marketing in USA and has marketed Nepali hand-made paper products for the 2007 holiday season. Aveda is supplied certified hand-made paper from Nepal by HBTL, a local export and manufacturing firm. The value chain begins in Nepal's mountain community forests where Lokta is collected by poor rural famers and sold to Malika Hand-made Paper Pvt. Ltd. – a collectively-owned processing firm. The firm prepares hand-made paper sheets and supply to HBTL. The HBTL liaises with Aveda to manufacture products like cards, bags, envelops etc. from the sheets. The uniqueness of the paper is coupled with its high quality and certification standard, which in return provides a competitive advantage for the poor farmers in Nepal.

(b) Product differentiation

The other more innovative way to bring in competitiveness to the firm and resultant competitiveness in the value chain is to bring in uniqueness to the products and services that the firm has to offer. For firms within natural products value chains, this can be brought by tools such as product branding, unique attributes, ratio and quality. Certification schemes, such as organic, fair trade, forest management, can further add value to the products and services thereby giving it a distinctive advantage.

(c) Shaping demand around unique characteristics

A further strategy for the competitive advantage for a firm is developing its capacity not only to understand the market demand, but to also shape the demands of their products in the end markets based on the unique characteristics of their products and services.

5.4.2 Industry-level upgrading strategies

Industry-level upgrading strategies include:

(a) Fostering enabling environment

At the program intervention and activities level, you will have to look at strengthening enabling environment at three levels – local, national and international. Fostering the enabling environment requires:

- identification of constraints and opportunities at all 3 levels;
- coordinating to increase incentives for transparent business practices, conflict resolutions and mitigating the impact of corruption and public institutions inefficiencies; and
- Advocacy on developing conducive policies that favor CBFEs and reduce business related burden.

[1] *FSC (Forest Certification Scheme) through the Rainforest Alliance Smartwood program*

(b) Coordinating Inter-firm cooperation and coordination

CBNPEs often are not connected to value chains that reach beyond their local community. Facilitating the establishment of these linkages on a rational and commercial basis is often one of the initial steps needed to provide CBNPEs access to more promising market opportunities. In the same manner, lead firms including exporters and processors may not have adequate linkages to local CBNPEs. It is important to foster such linkages for improved coordination and relationships between such value chain actors.

(c) Developing sustainable supporting markets- business development services

Inputs and services, like seeds, fertilizers, veterinary services and business support like registration, audits etc. needs to be provided within a market context to assure not only sustainable delivery, but also to foster greater flow of information, knowledge and skills for CBNPEs. You will find more on this topic in the next section.

5.5 DEVELOP SYSTEMS FOR SERVICES DELIVERY ON A SUSTAINABLE BASIS

5.5.1 Why business development services (BDS)?

Development of community-based natural products enterprises (CBNPEs) is often constrained by the supply of critical services in rural settings- especially for economically disadvantaged people, women and minorities. This hinders their earnings potential and success as small entrepreneurs. CBNPEs are also characterized for having the people with significantly low education rates, higher rates of unemployment, and higher rates of poverty. They have limited access to business capital. Both these shortfalls compromise their ability to develop viable businesses, to network within existing business communities and to access finances needed develop and run CBNPEs. If under-served populations can access such critical business services and non-conventional lending sources, it is possible that their self-employment rates and business success will improve.

CBNPEs typically require two types of services: financial and non-financial services- more commonly referred to as "business development services" or by the acronym "BDS". Financial services help existing or would-be entrepreneurs acquire the means for establishing or expanding a business (e.g. finance for machinery, production premises, and working capital). On the other hand, BDS refers to the provision of information, knowledge and skills, as well as advice on the various aspects of a business. Here the service provider carries out a conscious action for the benefit of the service receiver.

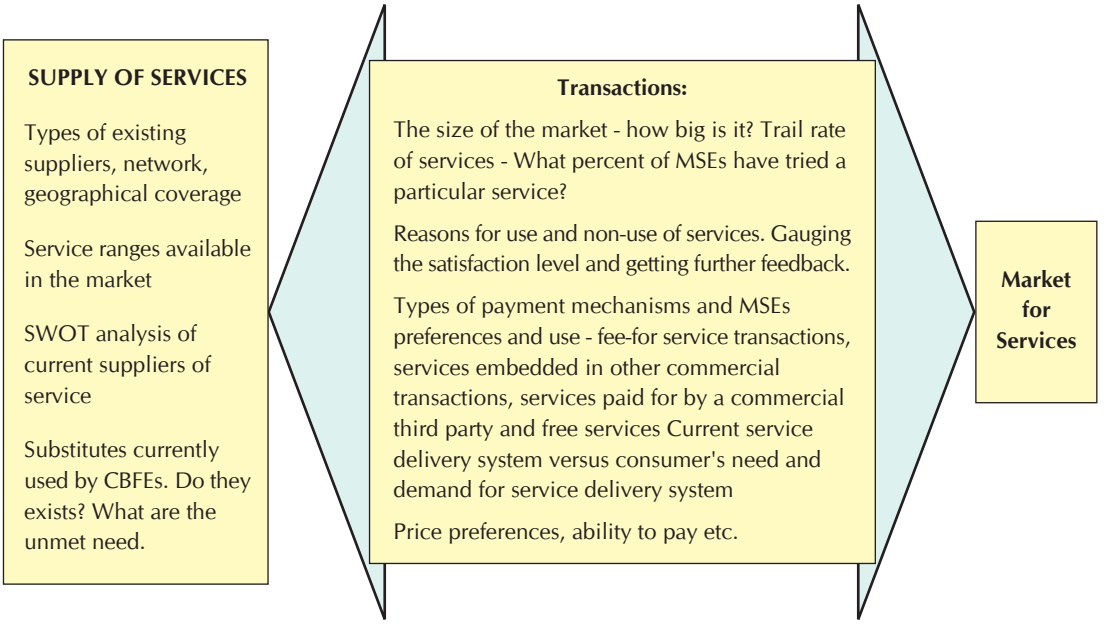
The impact of BDS depends on the proficiency of the service provider and on the use made by CBNPEs of other services. BDS should be demand driven, and the owner of the enterprise should recognize the need for BDS assistance. However, the service provider may also have a role in helping the entrepreneur to identify the specific problems of the enterprise, and in offering appropriate assistance which should ensure that the BDS services are relevant.

Who provide the BDS? Commercial firms or by non-profit organizations can provide the BDS. The services provided on a commercial basis include the services made available by private sector offering specialized services (e.g. repair and maintenance of equipment) with fees applied to cover the full cost of the services. Making profits is the main motivation of these service providers. These services are demand-driven and client satisfaction plays an important role in the growth of these service providers.

Below you will go through the steps that are necessary to develop and institutionalize a system of delivering business development services on a sustainable basis.

5.5.2 Promote the supply of business development services

For the design of a BDS-based program having interventions on CBNPEs, or micro and small enterprises (MSEs) in general, it is important to understand the existing BDS market. You need to look at the service providers, their supply situation, and the MSEs and their demand of services (See Figure below).



Supply and Transaction relationship for BDS

In most cases BDS providers for MSEs are likely to be very narrow in scope, focusing on the specific service to be supplied, the characteristics of the target market, and existing or potential competitors. The relevant BDS market will need to be defined according to the specific type of service, target clientele, and geographical coverage.

The following key considerations when conducting BDS Market assessment:

In industrialized economies, many owners and operators of MSEs tend to subscribe to or network with various specialized knowledge providers like trade magazines, newsletters and information packet providers which compile and distribute the latest market information on their field of business. They become members of trade associations or chambers of commerce which represent the MSE sector. These organizations carry out research on market trends and manage information centers, which provide up-to-date market information to their members specialized on a particular field of expertise. This information can also be obtained from specialized fairs like trade fair. A well-developed network of wholesalers and retailers, and good telecommunications, transport and financial networks facilitate commercial transactions and the quick processing of orders. More recently, many MSEs are making use of electronic commerce (called "e-commerce") through the Internet. However, such marketing information is not so easily accessed in developing countries. The case below illustrates an example of the use of market information system as a tool to promoting livelihoods and conservation.

How does BDS help stakeholders? Case of NTFPs market information system (MIS) services

Non-timber forest products (NTFPs) are a source of employment to millions of collectors, village traders and exporters in Nepal, at least seasonally. However, inadequate access to information and marketing support undermined the income of rural communities and entrepreneurs, and constrained the NTFP subsector development. To address this gap, a marketing information system (MIS) was developed by ANSAB in 2001. It aims to increase access to marketing information of local collectors, harvesters and traders so as to enable them to get fair share from the trade.

The MIS service collects, analyzes and disseminates marketing information of 32 major traded species to collectors, local traders, entrepreneurs and development facilitators. It gathers information from major markets in Nepal and India. The information is disseminated through 11 local MIS centers, located across key NTFPs producing/trading centers, national and local projects, NGOs, government agencies) and the Federation of Community Forestry Users, Nepal (FEOFUN. MIS services include price information in monthly/and weekly interval from major production and trading centers in Nepal and India. In addition, information on pre and post harvest techniques, enterprise development options, local value addition technologies and business linkages facilitation are also provided. To cater to the needs of clients, it also provides customized marketing information services.

The MIS Service has increased the knowledge base and bargaining capacity of collectors and entrepreneurs. It helped them develop new enterprises and find new markets for their products; and in turn contributed to increase their incomes. It also helped the government to adjust royalty and taxes, banks to evaluate prospects of NTFP loan proposals, NGOs to design poverty focused programs, and community-based enterprises to gain higher sales price.

5.5.3 Enhance the demand for BDS

As the role of BDS service provider is gradually moving to the private sector, more attention is needed to look at commercial viability, sustainability, appropriateness and quality of the services. The BDS providers need to be viewed as commercial entities engaged in profit-making activities, especially in the context of the need for financial sustainability. Consequently, BDS providers are beginning to behave like the owners of successful enterprises who pay special attention to understanding the needs of their clients and tailoring their products and services to meet these needs in the most competitive manner possible.

BDS Needs of Micro and Small Enterprises

1. **Perceived needs:** These are the needs based on the entrepreneur's own assessment of the problems and potential solutions. These are highly subjective as they are based on the knowledge, experience, exposure, motivation, ability and opportunities of the MSEs alone;
2. **Real needs:** These needs are the result of the service provider's own analysis of the situation which can be less subjective than perceived needs but can be influenced, once again, by the opportunity, motivation and ability of the service provider; and
3. **Demand:** Demand is expressed by the willingness to pay by the MSEs for assistance to solve a problem or pursue an opportunity and in market terms is the most suitable indicator.

Experiences have shown that the service needs of MSEs vary with respect to their location, size, type of sector, supporting markets, policies, etc. Their needs of the MSEs can be categorized into three areas (See Box). Developing services in a generally uncertain and dynamic business environment means that BDS providers need to thoroughly understand their clients and their needs.

It is important that BDS providers should respond by giving priority to the perceived needs of the entrepreneurs, as well as their willingness to pay. However, this should not prevent the service providers from educating entrepreneurs about other "real" needs they may have, but are not be aware of, or about the existence of new, more effective interventions. Many successful examples of service providers who decided to respond to the felt needs of the entrepreneurs clearly constitute examples of good practice.

Various approaches to needs assessment have been developed and used in different countries. The more successful ones make use of the five guiding principles (see box):

Guiding principles for BDS service demand assessment approach

- The individual in charge of the needs assessment should be psychologically close to the MSE client. Such a person usually has a crucial influence in determining which needs will be assessed and, ideally, is also be in charge of the planned interventions.
- The MSE client should participate fully, both in the needs assessment and the design of interventions based on the assessment. This should yield better intervention design and develop a stronger sense of client ownership.
- A needs assessment exercise should not be a one-off activity. The service provider should visit clients periodically to determine if further assistance is needed.
- It is important to develop a tight focus, and problems and interventions should be described in detail. Generic interventions based on general statements are not normally very useful.
- It is very important to explain how support interventions should be delivered and carried out - for example, there may be few clients for a training course that is held at the wrong hour or the wrong day of the week.

Source: Committee of Donor Agencies for Small Enterprise Development, 'Business development services for SMEs - Preliminary guidelines for donor funded interventions', 1998, ILO

SELECTED BIBLIOGRAPHY

ANSAB and EWW.2000. Enterprise Development for Natural Products Manual Kathmandu: ANSAB and EnterpriseWorks Worldwide

Binayee, S. B., Sapkota, I. B., Subedi, B. P. and Pun, L. (2004) Microfinance for Small Scale Tree and Forest Products Enterprises: Opportunities and Challenges for the Local Producers in Forestry Sector: Nepal Microfinance Case Study Report Submitted to FAO Forest Products Service by ANSAB.

CIAT. 2001. A manual series on the territorial approach to rural agro-enterprise development. International Center for Tropical Agriculture. Available at http://www.iied.org/pubs/display.php?o=9536IIED&n=11&l=82&g=India

Duerr, W. A., Teerguarden, D. E., Christiansen, N. B. & Guttenberg, S. (eds.). 1979. Forest Resource Management: Decision Making Principles and Cases. W. B. Saunders, Philadelphia, USA

FAO. 1995. Environmental Dimension of Non-wood Forest Products. In Report of the Expert Consultation on Non-wood Forest Products, Yogyakarta, Indonesia, 17-27 January 1995.Food and Agriculture Organization, Rome

FAO. 2002. Community-based tree and forest product enterprises: Market Analysis and Development - USERS' GUIDE TO THE FIELD MANUAL, Food and Agriculture Organization of the United Nations, Rome

IRG (2006) FRAME Role of Natural Products in Resource Management, Poverty Alleviation, and Good Governance: A Case Study of Jatamansi and Wintergreen Value Chains in Nepal. Washington, DC: International Resources Group

Macqueen, D. (2006) Governance towards responsible forest business: Guidance on different types of forest business and the ethics to which they gravitate. Edinburgh, IIED.

Matthews, J. D. 1991. Silvicultural Systems. Oxford Clarendon Press.

MoA (2003) Strategy for Farmers' Groups in RNR Enterprise Development, Thimpu, Ministry of Agriculture

NSCFP. 1999. What Hanuman Brought not only Jaributy, Vol. 1. Nepal Swiss Community Forestry Project, Ekantakuna, Kathmandu

Ojha, HR, Subedi, BP and Dangal, SP (nd) Management of Non-Timber Forest Products: Recent Innovations in Resource Assessment and Sustainable Harvesting. ANSAB Discussion paper. Kathmandu

RECOFTC. 2000. Farmers'forest Management School's Development: an Effective Facilitation. Rural Learning Networks Bulletin No. 7. Regional Community Forestry Training Center, Bangkok, Thailand

Rijsoort, V. J. 2000. Non-timber forest products their role in sustainable forest the tropics. Theme Studies Series 1. National Reference Center for Nature Management (EC-LNV), International Agriculture Center (IAC), Wageningen, the Netherlands

Robbins, P., Bikande, F., Ferris, S., Kleih, U., Okoboi, G., Wandschneider, T. (nd.) Collective Marketing for Small-scale Producers: Manual 4- The Territorial Approach to Agro-enterprise Development. IITA Foodnet, CMIS, RadioWorks, DFID, PMA/NAADS, CEDO and NRI.

Roche, L. 1999. The profession of Forestry Now and in the Year 2000. Common Wealth Forestry Review 71 (1): 13-19

Saigal S. 2000. Does Community Based Conservation Make Economic Sense? Lessons from India. Available at http://www.kalpavriksh.org/f5/f5.1/pubcbc.

Singhal, R. 2000. A Model for Integrating Indigenous and Scientific Forest Management: Potentials and Limitations for Adaptive Learning. In A. Lawrence (ed.)Foretry, Forest and Research: New Ways of Learning. European Tropical Forest Research Network (ETFRN), AE Wageningen, The Netherlands

Staz, J., Kotru, R., Beukeboom, H., Rasul, G, Kerkhoff, E. and Karki, M. (2007) Advances in Participatory Forest Management in South Asia: Learning from Field Experience in Bhutan, India and Nepal. Talking Point 1/07. Kathmandu: ICIMOD

Subedi B. P. 1997. Participatory Management of High Value NTFPs, ANSAB (Asia Network for Sustainable Agriculture and Bioresources), Kathmandu, Nepal

Subedi, B.P. 2006. Linking Plant-Based Enterprises and Local Communities to Biodiversity Conservation in Nepal Himalaya. New Delhi: Adroit Publishers. Pp. 244 (ISBN: 81-87392-70-3).

Subedi, B.P. et al. 2000. Enterprise Development for Natural Products Manual. Kathmandu: ANSAB and EnterpriseWorks Worldwide, USA.

Subedi, B.P. et al. 2002. Community-Based Forest Enterprises in Nepal: Case Studies, Lessons and Implication. Kathmandu: ANSAB and SNV/Nepal. Pp. 109 +11 (ISBN: 99933-5338-8, second edition in 2004).

Subedi, B.P. et al. 2004. Forest Products Based Enterprise Development – Field Manual (in Nepali). Kathmandu: ANSAB. Pp. 76 (ISBN: 99933-796-1-1).

Subedi, B.P., Ojha, H. R., Nicholson, K. and Binayee, S. (2002) Community-based forest enterprises in Nepal: Case studies, lessons and implications Kathmandu: ANSAB

Subedi, B.P., S.B. Binayee, I.B. Sapkota. 2004. Enterprise-oriented community forestry in Nepal: Strategies and lessons. In: N. Bhattarai, M. Karki (eds.), Local experience-Based National Strategy for organic production and management of MAPs/NTFPs in Nepal. MAPPA/IDRC, CCO, HMG/Nepal. Pp 55-64.

Subedi, B.P., Surya Binayee, and Indu Sapkota. 2005. Assessing Community Forestry Governance and Functioning: Analysis from field research. Asia Network for Sustainable Agriculture and Bioresources (in collaboration with Yale University, USA), Kathmandu.

Subedi, BP (2001) Community Forestry, Non-Timber Forest Products and Livelihoods in western Nepal Himalaya Prabhat Pokhara: Institute of Forestry

WWF (2006) Community-based natural resource management manual, Southern African Regional Office, WWF.

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