

A Guide to the Assessment of Non-Timber Forest Resources on Community Forests



British Columbia Community Forest Association
and The Centre for Non-Timber Resources

This document was produced with the financial support of the Community Economic Development Technical Assistance Program (CEDTAP), Bell Canada and the Vancouver Foundation

April 2008



A Guide to the Assessment of Non-Timber Forest Resources on Community Forests

INTRODUCTION

This guide is designed to provide community forests with the information needed to make informed decisions about the management and use of non-timber forest resources (NTFRs) in community forests. The series of questions covered within the guide will help users to understand key issues surrounding specific resources as well as the NTFR sector in general, and make some initial determinations regarding the potential for, and desirability of, resource development. For enterprise development purposes, this assessment tool will not take the place of detailed business planning tools that are highly recommended, especially where significant financial investments are being considered.

Prior to proceeding through the questions in the guide, readers should have a clear understanding of the range of resources known as 'non-timber forest resources'. One widely accepted definition is:

Non-timber forest resources are all of the botanical and mycological resources of the forest and their derived products, excluding conventional wood products such as timber, pulpwood and shakes. NTFRs include wild foods, craft and art products, floral greenery, medicinal and personal care products, bio-fuels and forage, as well as services such as ethnobotanical education and forest-based tourism (Centre for Non-Timber Resources, Royal Roads University).

A wide range of additional reference materials on NTFRs are available through the Centre for Non-Timber Resources website at: <http://www.royalroads.ca/cntr>.

The tremendous diversity of resources and potential products defined as 'NTFRs' or 'non-timber forest products' means that it is unrealistic to address every potential question that might be connected to these resources. Instead, the objective of this guide is to assist users to know the 'right questions' to ask about assessing their non-timber forest resource base. The guide should also help users in determining under what conditions further development of these resources may or may not be appropriate.

Structure of the Guide

The layout for the guide is based on a series of 'key questions' followed by 'comments, notes or actions' related to the key question. Where possible, additional reference materials that may assist in answering (or at least further exploring) questions will be provided as a starting point for users requiring additional information. Through experience and the review of other materials, the

authors have done their best to ensure the guide covers the key questions that should be asked in any assessment of these resources. However, users should keep in mind that given the diversity of the sector and the broad range of stakeholders with potential interests in this area, it is conceivable that additional questions may need to be addressed for specific resources and under certain circumstances. The Guide has been kept as concise as possible in the hopes that the target audience will not perceive its use as a burden, but as a useful quick guide for NTFR assessment.

The following topics are addressed in the Guide:

- Section 1: Assessment of Natural and Human Resources
 - Part A: Understanding the Natural Resource Base
 - Part B: Understanding the Human Resource Base
- Section 2: Assessing Opportunities for NTFR Development in Community Forests
 - Part A: Ecological Subset: Understanding Issues and Addressing Challenges
 - Part B: Social Subset: Understanding Issues and Addressing Challenges
 - Part C: Economic Subset: Understanding Issues and Addressing Challenges
 - Part D: Market Subset: Understanding Issues and Addressing Challenges
 - Part E: Policy and Regulatory Subset: Understanding Issues and Addressing Challenges
- Section 3: The Potential Role of Community Forests in NTFR Development

The order of the questions is not intended to imply that one issue has more importance than another; though clearly, questions related to the resource base and other existing or potential users of the resource should factor large in any decisions regarding NTFR management and/or development. The priority assigned to the various questions may depend as much on the perspectives and interests of the user (i.e., resource manager, economic development officer, etc.) as on any logical approach to exploring the sector. Users are urged to review all sections of the guide to gain an improved understanding of the range of issues and potential challenges facing the management and development of non-timber forest resources.

Acknowledgements

This guide owes a debt to other assessment tools created specifically for NTFRs/NTFPs, as well as an assessment tool targeted at specialty crops (as defined by the Ministry of Agriculture and Lands). This Guide is an attempt to take the applicable content of these other guides and create a user-friendly tool focused on the specific needs of community forests for understanding NTFR-related issues. The guides referred to in the development of this guide include:

- Framework for Evaluating Specialty Crops, Part 1 and 2. Ministry of Agriculture and Lands (Lisa Zabek, compiler) (http://www.agf.gov.bc.ca/speccrop/publications/evaluate_spcrop.htm). This publication provides a wealth of additional resources for planning purposes and is highly recommended.
- Non-Timber Forest Products Scoring Rubric, Hobby et. al. 2005. Centre for Non-Timber Resources, Royal Roads University (unpublished)
- Assessment tools for NTFPs created by the Northern Forest Diversification Centre, Manitoba (unpublished; the NFDC website is at www.nfdc.ca)

Section 1: Assessment of Natural and Human Resources

Part A: Understanding the Natural Resource Base

Key questions	Comments/notes/actions	Resources
<p>1. What information is available to help develop a list of the non-timber forest resources present in your area?</p>	<p>Identify the information that is available to help with this task. Sources may include:</p> <ul style="list-style-type: none"> • forest inventory information – although keep in mind that standard or ‘traditional’ forest inventories have focused on timber resources, not NTFRs • key informants knowledgeable about non-timber resources in the area (i.e., harvesters, buyers, other resource managers, etc.) • published or website information on non-timber forest resources in BC <p><i>NOTE 1:</i> A period of relationship building may be required prior to approaching key sources – especially harvesters – for information on existing NTFR/NTFP resources. Industry participants are sometimes wary of the motives of people asking questions, so it’s important to be transparent about your interest in the sector and to stress that information will not be shared further without their consent. First Nations may be concerned about sharing traditional knowledge and the potential impacts of commercial NTFR harvesting on the cultural/subsistence uses of these resources. [See question # 14 for more discussion on First Nations concerns regarding NTFR development].</p> <p><i>NOTE 2:</i> While local key informants often possess expert information, caution is advised in accepting information from only one source. Wherever possible, ‘triangulation’ (seeking information from more than</p>	<p>A wide range of useful resources are available on the website of the Centre for Non-Timber Resources at Royal Roads University http://cntr.royalroads.ca/</p> <p>Plant guides published by Lone Pine Publishing i.e. <i>Plants of Coastal British Columbia</i>; <i>Plants of Southern Interior British Columbia</i>, etc.</p> <p>Botanical Forest Products in British Columbia – An Overview http://www.for.gov.bc.ca/hfp/publications/00002/index.htm</p> <p>A list of NTFRs reported as being harvested in BC’s community forests in 2007 is provided in <i>Non-Timber</i></p>

Key questions	Comments/notes/actions	Resources
	<p>one source) of information is advised; any contradictions in the information provided can then be clarified to build as clear a picture of the local situation as possible.</p>	<p><i>Forest Product Development in BC's Community Forests and Small Woodlands: Opportunities and Constraints.</i> This document is available from the Centre for Non-Timber Resources.</p>
<p>2. How can existing forest inventories assist in assessing non-timber forest resources?</p>	<p>Existing inventories, such as Vegetation Resource Inventories (VRI), Terrestrial Ecosystem Mapping (TEM) or Predictive Ecosystem Mapping (PEM) can be used to develop an indication of the presence and abundance of NTFR species. If these inventories are not available for your area, a much broader estimation can be developed using the Biogeoclimatic Ecosystem Classification (BEC).</p> <p>For each of the above inventories, it may be possible to obtain the plot vegetation data (e.g. from the Ministry of Forests and Range, from the licensee, etc). Stratify the data to include only the relevant ecosystems – that is, the subzones, variants, site series, etc - which occur within the area of interest. Sorting the species data by percent cover will provide an initial indication of which species are the most available on the landscape.</p> <p>The data can be incorporated into a GIS mapping program such as ArcView, or free software such as VPro. This will enable a visual overview of where the species are predicted to be found. To refine the mapping, you can categorize species cover into low, medium and high cover by identifying the maximum cover value for each species, dividing the maximum value by thirds, and assigning all cover values for that</p>	<p>MoFR search engine, Ecocat: http://a100.gov.bc.ca/pub/accat/public/welcome.do</p> <p>MoFR Biogeoclimatic Ecosystem Classification webpage http://www.for.gov.bc.ca/hr/ebecweb/index.html</p> <p>For a clear example of a potential methodology for NTFR assessment, see <i>Non-timber forest product plant and fungal species in the Robson Valley Forest District</i> http://www.for.gov.bc.ca/hc/p/enhanced/robson/efmpp/research/2001%202002%2</p>

Key questions	Comments/notes/actions	Resources
	<p>species into the aggregate categories (e.g. if the maximum cover for salmonberry in the database was 15%, then low = 0-5, medium = 6-10, high = 11-15%. Therefore if a cover value for salmonberry in a plot was 12.5%, it would be assigned to the “high” cover category). It would then be possible to map predictions of low, medium and high cover for the area to visually determine the overall cover and abundance, as well as access, for the species of interest.</p> <p><i>NOTE 1:</i> current inventories do not address the quality of the product; for example, the presence of a berry bush does not necessarily indicate that it produces enough berries for harvest.</p> <p><i>NOTE 2:</i> ‘high’ cover of a species reflects only the relative ability of that species to thrive in the area of interest; the plant may be far more abundant in other ecosystems. For example, a ‘high’ cover of salal in the Chilliwack forest district may be less than a ‘low’ cover of salal in the North Island-Central Coast forest district.</p>	<p>0Final%20report%20RV%20EFMPP%20NTFP%20revised%202.pdf</p>
<p>3. Have you positively identified the species of interest?</p>	<p>Correct identification of NTFR species is essential for planning for the management and possible development of these resources. More than one common name may, and often does, apply to the same species and it is best to verify the scientific name wherever possible.</p> <p>Correct identification is especially critical in the case of certain products i.e., those used for food and medicine. Numerous resources are available to assist with correct identification.</p> <p><i>NOTE:</i> You may not be in a position to identify species of interest at this stage of the assessment, but the need for correct identification should be recognized from the beginning of the assessment process.</p>	<p>Plant guides published by Lone Pine Publishing i.e. <i>Plants of Coastal British Columbia; Plants of Southern Interior British Columbia</i>, etc. http://www.lonepinepublishing.com/</p> <p>A good on-line resource for plant identification is E-Flora BC http://www.geog.ubc.ca/~br</p>

Key questions	Comments/notes/actions	Resources
		ian/florae/identification.html A resource outlining the importance and methods of plant identification: <i>Good Practices for Plant Identification for the Herbal Industry</i> http://www.saskherbspice.org/Good%20Practices%20for%20plant%20identification.pdf

Section 1: Assessment of Natural and Human Resources

Part B: Understanding the Human Resource Base

Key questions	Comments/notes/actions	Resources
4. Who are the stakeholders in the local NTFR sector?	There is a potentially broad range of individuals and groups with a stake in the development/management of NTFRs in any given location. These may range from subsistence/cultural harvesters (especially those from local First Nations), recreational forest users, to commercial harvesters and NTFP-based businesses. They may also include resource managers	<i>Creating a Regional Profile for Non-Timber Forest Products</i> . Centre for Non-Timber Resources, 2007.

Key questions	Comments/notes/actions	Resources
	<p>other than those responsible for the CF.</p> <p>To develop a picture of who is involved in the sector in your area, start off by asking some key questions of other resource managers, local economic development experts, First Nations leadership and Elders, and anyone else with ‘their finger on the pulse’ of what’s going on in the forest.</p> <ul style="list-style-type: none"> • What harvesting is occurring and for what purpose (cultural, recreational, commercial)? • Who is involved? • What are they picking? • Are there buyers operating in the area? 	<p>Buy <i>BCwild</i> is an annually produced directory of buyers and sellers of NTFPs in British Columbia. It may provide an indication of businesses operating in your area, recognizing that only a portion of the NTFR-based businesses operating in the province are listed in the directory.</p> <p>http://cntr.royalroads.ca/files-cntr/BuyBCwild2007.pdf</p>
<p>5. What assets already exist in the community that may be relevant for sector development?</p>	<p>The idea of ‘asset-based community development’ involves understanding the potential for mobilizing existing but often unrecognized assets within the community towards development initiatives. These assets may include:</p> <ul style="list-style-type: none"> • Interests and abilities held by individuals (i.e., food technologists, crafters, herbalists, etc.) • Existing relevant businesses (tourism providers, B&Bs, marketing agency, shippers, etc.) • Social relationships (local societies or clubs) • Facilities (i.e., for processing, cold storage) • Other <p>Spend some time drawing up a list of potential assets and be prepared to add to it as plans solidify around one or more NTFR opportunities.</p>	<p>Community Futures Development Corporations have a mandate to foster local entrepreneurship and community development. They may be a source of information on local assets, as well as on opportunities to link with other initiatives and training.</p> <p>http://www.communityfutures.ca/provincial/bc/</p> <p>See <i>Creating a Regional Profile for Non-Timber Forest Products</i> (Centre for</p>

<i>Key questions</i>	<i>Comments/notes/actions</i>	<i>Resources</i>
		Non-Timber Resources, 2007) for suggestions on developing a more detailed profile of your area.

Section 2: Assessing Opportunities for NTFR Development on Community Forests

Part A: Ecological Subset: Understanding and Addressing Issues and Challenges

<i>Key questions</i>	<i>Comments/notes/actions</i>	<i>Resources</i>
6. Is the species under consideration identified as endangered or at risk?	<p>In general, it is not possible to justify the harvest of endangered or at risk species except perhaps as traditional use species and even then only under very careful guidelines. In BC, none of the most commercially important NTFR species that are currently harvested could be considered 'at risk', but vigilance is required. Unfortunately, there are a number of examples of NTFRs in North America that have been over-harvested (i.e., North American ginseng and goldenseal).</p> <p>Consult the proper references if concerns exist about the status of a particular species.</p>	<p>A listing of endangered or at risk species for BC can be found at: http://www.env.gov.bc.ca/atrisk/toolintro.html</p>

Key questions	Comments/notes/actions	Resources
7. What is the potential for sustainable harvest of the species?	<p>The potential for sustainable harvest will depend on a number of factors, among them:</p> <ul style="list-style-type: none"> • What part of the plant is being harvested? Berries and aerial parts removal will likely have significantly lesser impacts than root harvest/whole plant removal. • What are the regeneration or growth rates for the species? • What is its resilience to disturbance (i.e., response to logging or fire)? • What is the timing of the harvest? For example, an early season harvest may impact the ability to successfully produce seeds. 	<p>NTFP Bibliography: This bibliography provides a searchable database of references on NTFPs. www.royalroads.net/ntfp/bibliography</p>
8. What knowledge exists of the species growth habits and response to harvesting?	<p>If many of the questions could be answered in #7, this question may not apply. If the majority of the questions could not be answered, assessing the potential for sustainable harvest may be difficult or impossible without future research. Many questions remain about harvesting impacts on some species. Seek out knowledgeable individuals who can provide information on observed harvesting impacts and best harvesting practices.</p> <p>Without adequate knowledge, an adaptive management approach may be required if the decision is taken to proceed with development. Consult knowledgeable sources and consider establishing research plots to monitor harvesting impacts and plant response.</p>	<p><i>A Harvester's Handbook (Coastal Edition); a guide to commercial non-timber forest products in British Columbia.</i> Centre for Non-Timber Resources, 2007. An interior version of the Harvester's Handbook will be available soon.</p> <p>More detailed information on a selection of NTFP species can be found in: <i>Botanical Forest Products: Effects Upon Operational Planning.</i> http://www.for.gov.bc.ca/hfd/Library/documents/bib43618.pdf</p>

Key questions	Comments/notes/actions	Resources
		<p>Additional information on selected species may be available through the CNTR website http://cntr.royalroads.ca/</p>
<p>9. Does the potential exist for enhancing the resource through appropriate harvesting or other interventions?</p>	<p>There are examples of harvesting practices leading to enhancement of the resource when done properly. i.e., bough harvesting leading to increased branching and additional material for wreath production. [Although this may conflict with other objectives i.e., pruning the whole branch for improved timber quality].</p> <p>On a larger scale, appropriate management decisions may lead to improved production of the non-timber forest resource at limited or no cost to the other objectives – such as timber production – of the CF. Please see the section on compatible management (question # 44) for more information.</p>	
<p>10. What information is known on the distribution and general abundance of the species on the CF?</p>	<p>Please refer to the previous questions on inventory (# 2) and key informants (# 1). The Biogeoclimatic Ecosystem Classification (BEC) database is an important source of detailed ecological and species information that may provide useful information on distribution and general abundance on NTFRs.</p>	<p>BECWeb is the web portal for the BEC and Ecology Research program of the BC Ministry of Forests and Range. http://www.for.gov.bc.ca/hre/becweb/</p>
<p>11. What is the likely harvesting</p>	<p>Potential impacts on water, soil, and associated species will depend to a certain degree on the location where the plant is found. Impacts may be greater on sensitive sites such as riparian zones, bogs, etc. These</p>	<p>Some information on potential site impacts due to harvesting is available in <i>Botanical</i></p>

Key questions	Comments/notes/actions	Resources
location for the species (i.e., stream edge, forest edge, bog, etc.)?	impacts may also vary depending on the species and plant part being harvested – for example whole plant removal with soil disturbance as a consequence. If harvesting is to occur on more sensitive sites, planning may be required to mitigate impacts.	<i>Forest Products: Effects Upon Operational Planning.</i> http://www.for.gov.bc.ca/hfd/Library/documents/bib43618.pdf
12. What are the potential anthropogenic (people-related) impacts associated with harvesting activities?	<p>There are a number of potential additional impacts caused by harvesting activities. These might include:</p> <ul style="list-style-type: none"> • Increased risk of fire • Increased foot traffic in sensitive areas • Increased potential for human-wildlife interaction <p>Ideally, proper training should be provided to harvesters prior to their venturing into the forest to ensure potential impacts are minimized. If this is not possible, basic information should be provided to harvesters on low-impact harvesting.</p>	An overview of minimizing impacts can be found in <i>A Harvester's Handbook (Coastal Edition); a guide to commercial non-timber forest products in British Columbia.</i> Centre for Non-Timber Resources, 2007. An interior version of the Harvester's Handbook will be available soon.
13. How is the species used by wildlife and what impact – if any – is likely through harvesting activities?	<p>Potential impacts of increased or new harvesting on wildlife may be difficult to assess with certainty. Certain NTFRs (i.e., berries of the genus <i>Vaccinium</i>) are of great importance to wildlife (such as bears). In other cases, harvesting could conceivably lead to improvements in wildlife use (i.e., creating improved ungulate forage through cutting willow stems for floral products).</p> <p>As noted above, there may be significant risk of increased human-wildlife interaction as human use of the forest increases. The impacts of harvesting on wildlife are often unclear. Because harvesters often try to work as close to transportation routes as possible (for obvious reasons), much of the resource may practically go untouched by NTFR harvesters.</p>	Some information on potential harvesting impacts on wildlife is available in <i>Botanical Forest Products: Effects Upon Operational Planning.</i> http://www.for.gov.bc.ca/hfd/Library/documents/bib43618.pdf

Key questions	Comments/notes/actions	Resources
	If impacts seem likely, monitor the situation and develop a plan to minimize the effects on wildlife such as through the creation of 'no-go' areas for harvesters.	

Part B: Social Subset: Understanding and Addressing Issues and Challenges

Key questions	Comments/notes/actions	Resources
14. Does the species have traditional use or other cultural importance to First Nations?	<p>Consult with local First Nations and other experts as to the traditional use and importance of the species in question. There are significant concerns on the part of many Aboriginal people over the use and possible commercialization of some NTFRs (i.e., traditional medicines). Therefore, certain NTFRs may not be suitable for further development, or development only under specific conditions.</p> <p>If the proposed product is derived from an important traditional use species, discuss under what conditions (if any) development could proceed. Explore options for joint ventures or other strategies to address concerns. Consider developing written agreements with local First Nations on how NTFR-related activities will proceed while respecting their interests.</p> <p>See the attached references for background on First Nations concerns and for suggestions on developing meaningful and clear communications and agreements on topics of concern to all stakeholders.</p>	<p><i>“Doing it right”: Issues and practices of sustainable harvesting of non-timber forest products relating to First Peoples in British Columbia.</i> http://www.forrex.org/publications/jem/ISS1/vol1_no1_art6.pdf</p> <p><i>Non-Timber Forest Product Development: Opportunities and Constraints in BC’s Community Forests.</i> Available soon from http://cntr.royalroads.ca/</p>

Key questions	Comments/notes/actions	Resources
		<p><i>Understanding Opportunities in Non-Timber Forest Products: A Community Toolkit.</i> http://cntr.royalroads.ca/community_toolkit</p> <p>This site from the Institute for Culture and Ecology provides links to resources on cultural use issues: http://www.ifcae.org/ntfp/databases/products/cultural.shtml</p>
<p>15. Are there other cultural or recreational users of the species or of the forest that may be impacted by harvesting?</p>	<p>Increased or newly established commercial harvest of some NTFRs could lead to conflict with non-commercial users. For example, mushroom and berry picking by local people is a well-established pastime in many areas. Other users of the forest may resent harvesting activities in ‘their’ favourite areas, just as they might resent logging operations.</p> <p>Education for the public on how NTFR harvesting represents a valid activity in the Community Forest is likely the best strategy for addressing concerns. Recommending locations as “for recreational harvesting only” may be one option to address the concerns of other users, although under current legislation commercial harvesters likely could not be excluded from these locations.</p> <p>Educating harvesters on forest use etiquette may also serve to smooth</p>	<p><i>Integrating Non-Timber Forest Products into Forest Planning and Practices in British Columbia.</i> http://www.fpb.gov.bc.ca/special/reports/SR19/SR19.pdf</p> <p><i>Code of Ethics for the Manitoba Harvesters Association.</i> Available through the CNTR by request: ntfp@royalroads.ca</p>

Key questions	Comments/notes/actions	Resources
	relations with other stakeholders. See the document on 'Code of Ethics for Harvesters' for more information.	
16. Is there local community support for the development of NTFRs?	As with any new proposed activity, local support is desirable before proceeding with new initiatives in NTFR development. If a degree of discomfort with NTFR development is sensed among the community, it may be necessary to re-think the strategy and/or to embark on an educational program to ensure community members have a sound basis for decision-making. Attempt to determine the basis for concern and address it where practical.	Ideas on discussing why communities should be interested in NTFR development can be found in <i>Understanding Opportunities in Non-Timber Forest Products: A Community Toolkit</i> . http://cntr.royalroads.ca/community_toolkit
17. How does the timing of NTFR activities fit in with other livelihood strategies in the community?	What other income-generating activities are people engaged in within the community? If the timing of proposed NTFR harvesting conflicts with already well-established activities in the community, finding individuals to participate in these activities may be difficult or impossible. It may be useful to assess how the proposed activity fits into the 'seasonal round' of activities in the community. If conflicts with other activities are too great, modify plans and/or seek other opportunities.	Please see <i>Creating a Regional Profile for Non-Timber Forest Products</i> available through CNTR for information on how to construct a profile on economic activity in your area.
18. What hazards exist for industry participants?	As with other industries, potential hazards exist for participants in the NTFR industry. The biggest risk faced by harvesters include getting lost while harvesting, injuring themselves (i.e., broken bones, eye injuries), and animal encounters. To a certain degree, these risks can be reduced through proper education on bush safety and the correct use of tools	

Key questions	Comments/notes/actions	Resources
	<p>(i.e., map and compass, GPS, proper footwear, etc.).</p> <p>Value-added activities represent a range of additional potential hazards related to the activity being engaged in (everything from wreath-making to essential oil production). Ensure proper training and required safety equipment is in place.</p>	
19. What are the required skills for industry participants?	<p>Develop a description of the skills required including answering the following:</p> <ul style="list-style-type: none"> • What level of technical knowledge is required and is it available? • What training is required and how can it be obtained? <p>Include the information in a skill development plan.</p>	<p>The CNTR may be able to suggest training resources for the NTFR industry. ntfp@royalroads.ca</p>
20. What, if any, aesthetic impacts are likely to be caused by the NTFR harvesting activity?	<p>Most NTFR harvesting creates few readily visible impacts – many observers may not know that a site has been harvested at all. Harvesting also frequently occurs in locations off the road where visual impacts are less likely.</p> <p>However, some harvesting has the potential for visual impact. For example, harvesting close to popular trails may lead to concerns among other forest users, and birch bark harvesting will leave long-term scarring on trees that many perceive as unattractive. Common-sense suggests that harvesting should be discouraged where it could create negative visual impacts.</p>	<p>For suggestions on avoiding or minimizing visual impacts caused by harvesting see the <i>Code of Ethics for the Manitoba Harvesters Association</i>. Available through the CNTR by request: ntfp@royalroads.ca</p>

Part C: Economic Subset: Understanding and Addressing Issues and Challenges

Key questions	Comments/notes/actions	Resources
<p>21. Is a market for the product well established?</p>	<p>Although even well-established markets present challenges, creating a market niche for an unknown product can prove even more difficult. Some NTFRs have well-established markets (wild mushrooms), although these markets may be located far from the point of production. Other potential products will be much less well-known (i.e., wild berry flavoured birch sap drinks).</p> <p>Assess the degree of market development required for the product; unknown products may require much more investment in terms of capital and time to establish on the market.</p>	<p>For information on further resources for market assessment see <i>Non-Timber Forest Product Development: Opportunities and Constraints in BC's Community Forests</i>. Available soon from http://cntr.royalroads.ca/</p>
<p>22. What level of investment is required?</p>	<p>Many NTFR-related activities require relatively little investment of capital compared to other resource-based activities, a feature that may make them attractive for entrepreneurs and others with limited access to capital. However, this is not true in all cases. What level of investment is required for:</p> <ul style="list-style-type: none"> • Harvest? • Post-harvest handling? • Processing? • Marketing? <p>Assess if capital as well as the required interest on the part of producers is available to support the required investments. Financing may be internal to the community or, under some circumstances, obtained from external sources (i.e., government funding initiatives).</p>	<p>Ideas for possible funding sources can be found in <i>Non-Timber Forest Product Development: Opportunities and Constraints in BC's Community Forests</i>. Available soon from http://cntr.royalroads.ca/</p>

Key questions	Comments/notes/actions	Resources
23. What is the potential profitability of the proposed activity?	<p>Assessing the potential profitability of NTFR-related activities requires looking at a range of factors, among them:</p> <ul style="list-style-type: none"> • Labour costs for harvesting/processing • Equipment and maintenance costs • Sales volume and pricing • and other factors. <p>It may be challenging to determine profitability with a high degree of certainty without doing test runs to determine production costs (time for travel and harvest, initial processing costs, etc.). <i>For projects involving significant levels of investment, a feasibility study is recommended prior to proceeding with any purchase of equipment.</i></p>	<p>A range of resources on business planning are available via the Community Futures website at: http://www.communityfutures.ca/provincial/bc/</p>
24. How accessible are the non-timber forest resources of interest?	<p>The feasibility of development depends heavily on the accessibility of the resources. What is the road and trail network on the CF? Will harvesters be able to access and transport resources? Maintaining road and trail networks is often cited by harvesters as a key support for their activities. Making maps of any roads and trails in the community forest publicly available is a useful first step in supporting harvesting.</p> <p>The process of developing new roads and trails may also create salvaging opportunities for harvesters. Consider informing harvesters of road building activities so they can harvest plant materials ahead of time.</p>	
25. Is the product available in the required quantities and quality to be	<p>In most cases, it isn't worthwhile to pursue opportunities unless you're confident that sufficient volumes of the product exist. Meeting quality requirements may depend on your post-harvest handling or processing system, but may also be a feature of the quality of the raw material.</p> <p>Seek guidance of buyers and others in the industry to determine the</p>	<p><i>A Harvester's Handbook (Coastal Edition); a guide to commercial non-timber forest products in British Columbia.</i> Centre for Non-Timber Resources, 2007.</p>

Key questions	Comments/notes/actions	Resources
economically viable?	required standards for the product. The Harvester's Handbook for interior and coastal areas provides information on standards for some non-timber products, as does the entrepreneur handbooks on floral greenery and wild foods.	An interior version of the Harvester's Handbook will be available soon. Two entrepreneur handbooks available starting in 2008 through CNTR (<i>Adding Value to Floral Greens: A Handbook for Entrepreneurs</i> and <i>Adding Value to Wild Foods: A Handbook for Entrepreneurs</i>) provide additional information on buyer requirements for specific products.
26. Is there a local workforce available and willing to work for the likely level of pay?	Preliminary and largely anecdotal research completed to date suggests that harvesters have a minimum requirement for expected earnings per day (somewhere in the range of \$80 - \$100) below which they are unlikely to find harvesting worthwhile. What is the anticipated pay that can be earned by an experienced harvester? Is this competitive with the potential for earnings from other local activities? What are the likely demands for labour for the activity and when?	Please see <i>Creating a Regional Profile for Non-Timber Forest Products</i> available through CNTR for information on how to construct a profile on economic activity and demographic trends in your area.
27. Is processing required prior	If harvesters are not selling material directly to processors, you must assess what processing equipment is required, and what investments are required. You must also ensure that your product can meet the required	<i>A Harvester's Handbook (Coastal Edition); a guide to commercial non-timber</i>

Key questions	Comments/notes/actions	Resources
to sale?	<p>standards of quality as discussed in # 25 above.</p> <p>Please see the Harvester's Handbook for descriptions of required quality standards for a range of NTFPs.</p>	<p><i>forest products in British Columbia</i>. Centre for Non-Timber Resources, 2007. An interior version of the Harvester's Handbook will be available soon.</p>
28. What is the potential for value-added production?	<p>Producing value-added products may help capture greater returns at the local level, improve the stability of the product for transport and storage, and provide other benefits to producers. However, there is also the potential that the added investment required is not compensated for by the increased price, and that required quality standards are difficult to achieve under local conditions. Adding value may also take producers into a new realm of regulatory requirements depending on the product and the market (i.e., food products, natural health products, goods destined for export).</p> <p>The potential for value-added production is almost always worth examining in more detail, but should be assessed with a critical eye. Value-added processing is not feasible or desirable in all circumstances.</p>	<p>For a discussion on adding value to some better-known NTFPs, please see <i>Adding Value to Floral Greens: A Handbook for Entrepreneurs</i> and <i>Adding Value to Wild Foods: A Handbook for Entrepreneurs</i>. These will be available from the CNTR in 2008.</p>
29. What is the potential for product salvage ahead of road building or other disturbances?	<p>Some NTFRs can be harvested from logging sites (including road building sites) prior to timber harvesting or road clearing. Examples include live plant transplants, bark stripping, and medicinal plant harvest. Plant salvage activities may be a 'win-win' situation as a positive example of cooperation between the NTFR and timber harvest, and more efficient resource management. A good starting point is discussing development plans with local harvesters to look for opportunities for product salvage. Please see the discussion on 'compatible management' (# 44) for ideas on incorporating salvage into management planning.</p>	<p>See the Forest Practices Board report http://www.fpb.gov.bc.ca/special/reports/SR19/SR19.pdf for a brief description of plant salvage; additional resources are provided in question # 44.</p>

Key questions	Comments/notes/actions	Resources
30. What is the potential impact – if any – on timber operations?	<p>The impact of NTFR harvesting on logging operations can be negative, positive, or neutral and should be considered through the CF planning process.</p> <p>Negative impacts could include damage to trees caused by improper pruning, increased risk of human-caused fires, and other risks presented by additional people on the land base.</p> <p>Positive impacts could occur through proper pruning, removal of competing vegetation, and additional observers on the land base.</p> <p>For more discussion on this topic, see the section on compatible management below (question # 44).</p>	

Part D: Market Subset: Understanding and Addressing Issues and Challenges

NOTE: Additional information on developing a business plan for NTFRs is available in *Non-Timber Forest Product Development: Opportunities and Constraints in BC's Community Forests*. Available soon from <http://cntr.royalroads.ca/>

Key questions	Comments/notes/actions	Resources
31. How would you	Developing a clear picture of the market situation will be essential to the success of NTFR-based enterprises. Some NTFRs present clear	A broad range of resources on market research can be

Key questions	Comments/notes/actions	Resources
rate the overall knowledge of the market situation?	challenges in terms of acquiring market knowledge given that markets are often urban and/or international. The level of investment required to produce the product should be reflected in the level of effort put into market research.	found in the <i>Framework for Evaluating Specialty Crops</i> , http://www.agf.gov.bc.ca/sp_eccrop/publications/evaluate_spcrop.htm . The Centre for Non-Timber Resources may also be a good starting point for information on NTFR markets: http://cntr.royalroads.ca/
32. What are the expected markets for the product and where are they located?	<p>Determining the target market and its location is key to planning your marketing strategies. Market location will influence everything from post-harvest handling, to transport needs, to the regulatory requirements you may have to address (i.e., for export markets).</p> <p>Determine if the target market is:</p> <ul style="list-style-type: none"> • Local • Regional • Provincial • National • International <p>A wide range of markets are available depending on the product. Farmer's markets, local restaurants, floral wholesalers, natural health product manufacturers.... Are just a few examples of potential markets for NTFRs. Spend some time on the web researching your products and speak to</p>	Market information for some NTFRs is available through <i>Adding Value to Floral Greens: A Handbook for Entrepreneurs</i> and <i>Adding Value to Wild Foods: A Handbook for Entrepreneurs</i> (available from the CNTR in 2008) and in <i>A Harvester's Handbook (Coastal Edition); a guide to commercial non-timber forest products in British Columbia</i> . Centre for Non-Timber Resources, 2007.

Key questions	Comments/notes/actions	Resources
	existing producers to develop a picture of existing and potential markets.	An interior version of the Harvester's Handbook will be available soon.
33. Can you compete with existing producers?	<p>What level of competition do you expect to face in the proposed market for your products? If the anticipated level of competition is high, you will need to develop a strategy to address this. Undercutting other producers on price may not be a successful strategy given they already have a position in the market.</p> <p>If the competition appears too difficult to address, you will need to find another market or possibly switch to a different product.</p>	
34. How stable is the market for the product?	Market stability is normally judged on demand and price. Speak to experienced producers (those operating outside of your area may be more willing to discuss this) as well as buyers for the product. If the market appears to be unstable, you will need to develop a strategy to ride out volatile market cycles. This may involve storing the product for a period of time (if feasible), or seeking out different markets, possibly based on different processing requirements (i.e., moving from bulk sales to retail).	See the <i>Framework for Evaluating Specialty Crops</i> , http://www.agf.gov.bc.ca/sp_eccrop/publications/evaluate_spcrop.htm for a number of sector-specific resources for further information.
35. What is the anticipated profit margin per unit of the product?	Complete a budget outlining all the inputs required to produce the product and compare to the likely selling price. If there is significant variation in input costs or selling prices (frequently the case with NTFRs), develop a range of scenarios reflecting this information. Be conservative in your outlook. Based on the scenarios you develop, determine the viability of your venture.	Examples of enterprise budgets are available through: http://www.agf.gov.bc.ca/bu_smgmt/budgets/herb_specialty.htm

Key questions	Comments/notes/actions	Resources
36. What is the market prognosis – does the market appear to be growing, shrinking, stagnant...?	Contact businesses (more than one) involved in the industry to develop a picture of where the market for the product is headed. What has pricing done over the last few years? What are the factors in any changes observed? The markets for some NTFRs are fairly dynamic and depend on trends in related areas (i.e., the 100 mile diet, interest in organic and gourmet foods, growing interest in functional foods such as wild berries, etc.).	The BC Ministry of Agriculture and Lands web resource <i>InfoBasket</i> provides information on a broad range of crops from the traditional to the non-traditional http://www.infobasket.gov.bc.ca
37. Is the product perishable, and if so, what is the potential impact on product marketing?	Perishable products add extra challenges for marketing. You will have to determine what handling is required for the crop to reach the market in acceptable condition and what costs this will add.	A number of resources on processing can be accessed via the <i>Framework for Evaluating Specialty Crops</i> , http://www.agf.gov.bc.ca/sp_eccrop/publications/evaluate_spcrop.htm .
38. What opportunities exist to certify the product, and are the benefits clear?	Third party certification (for organic and other practices) may be a possibility for some products. Prior to moving in this direction, determine what the market demand is for certified products and whether the returns outweigh the costs (both financial and otherwise).	Much information is available on organic as well as other forms of certification. The Certified Organic Associations of BC http://www.certifiedorganic.bc.ca/ is a good starting point.

Key questions	Comments/notes/actions	Resources
		The Canadian Herb, Spice and Natural Health Products Coalition has been working on a program for good agriculture and collection practices that is relevant to the NTFR sector. For more information, visit http://www.saskherbspice.org/

Part E: Policy and Regulatory Subset: Understanding and Addressing Issues and Challenges

Key questions	Comments/notes/actions	Resources
39. What are the potential impacts of secure or insecure tenure	Under current policy, there is no secure tenure over non-timber forest resources on Crown land. Although the industry has developed under the current regulatory vacuum, it has been argued that the lack of secure tenure has led to a reluctance on the part of industry to invest in business development initiatives which could lead to a more stable and sustainable sector.	

Key questions	Comments/notes/actions	Resources
rights on the proposed activity?	At this time, CFs cannot control access to non-timber resources, nor provide exclusive rights to these resources. Will this lack of secure access create a barrier to the development of any NTFR-related initiatives on the CF?	
40. How will the relevant regulatory framework influence your production and marketing of NTFRs?	<p>Answering this question largely depends on the end market for the product (Is it a food? Is it a natural health product being sold with health claims?) as well as where the product will be sold (at your local Farmers' Market, or half-way around the world?).</p> <p>Depending on the product and end market, a range of regulations and standards may apply, among them:</p> <ul style="list-style-type: none"> • food safety regulations (both Federal and Provincial); • product quality standards; • labeling standards; • container specifications (e.g. food grade). <p>Export markets generally have much more stringent requirements than a local farmer's market, but both require careful attention to product safety, especially if the product is to be consumed as a food or medicine.</p>	<p>The BC Association of Farmers' Markets provides some resources on food sales at http://www.bcfarmersmarket.org/web/vendors/resources.htm</p> <p>Other resources: Small Scale Food Processor's Association http://www.ssfpa.net/ Canadian Food Inspection Agency (CFIA) http://www.inspection.gc.ca/english/toce.shtml</p> <p>The Canadian Herb, Spice and Natural Health Products Coalition has been working on a program for good agriculture and collection practices that is relevant to the NTFP</p>

Key questions	Comments/notes/actions	Resources
		sector. For more information, visit http://www.saskherbspice.org/

Section 3: The Potential Role of Community Forests in NTFR Development

Key questions	Comments/notes/actions	Resources
41. What role is the Community Forest interested in playing in the area of NTFR development?	<p>The role the CF plays in NTFR development can range from fairly passive to quite active. The CF may decide to be:</p> <ul style="list-style-type: none"> • An active producer and marketer of NTFRs • A ‘facilitator’ of NTFR development where it provides opportunities for entrepreneurs wanting to develop NTFR-based businesses. <p>The decision will likely depend on the quality of the NTFR-based opportunity compared to other possible opportunities, and the capacity within the CF as well as the presence of an individual willing to ‘champion’ NTFR development.</p> <p>Care should be taken to avoid activities that could damage existing businesses, provided they are operating in an ethical fashion. There may also be opportunities to work with these businesses in a supportive</p>	<p><i>Understanding Opportunities in Non-Timber Forest Products: A Community Toolkit.</i> http://cntr.royalroads.ca/community_toolkit</p> <p><i>Non-Timber Forest Product Development: Opportunities and Constraints in BC’s Community Forests.</i> Available soon from http://cntr.royalroads.ca/</p>

Key questions	Comments/notes/actions	Resources
	<p>role.</p> <p>Some examples of facilitation and entrepreneur support can be found in the 'Community Toolkit'.</p> <p>If NTFR development is deemed to be a priority of your community forest, consult the BCCFA for additional information and recent developments in the area of NTFRs and CFs. Since the rights to manage for NTFRs are not automatic, it is best to clarify rights and responsibilities prior to producing any plans or programs for NTFR harvesting.</p>	
<p>42. What type of activities can the CF engage in to support NTFR development?</p>	<p>There are numerous ways CFs can support the development of NTFR businesses.</p> <ul style="list-style-type: none"> • Sourcing/identifying funding <ul style="list-style-type: none"> ○ for inventories, for workshops of various kinds, for business incubator, etc. • Raising awareness of NTFR opportunities in the community • Bringing ideas to CF workshops, sharing information • Hosting introductory workshops right through to skill development training (separate funding would likely be needed) • Facilitating positive relationships with stakeholders: <ul style="list-style-type: none"> ○ i.e., between First Nations and other users of the resource ○ creating opportunities for people to discuss issues ○ recognizing the importance of traditional use species. <p>A list of potential support activities that could be provided by the CF to the local NTFR sector is available in <i>Non-Timber Forest Product Development: Opportunities and Constraints in BC's Community Forests</i>.</p>	<p><i>Understanding Opportunities in Non-Timber Forest Products: A Community Toolkit.</i> http://cntr.royalroads.ca/community_toolkit</p> <p><i>Non-Timber Forest Product Development: Opportunities and Constraints in BC's Community Forests.</i> Available soon from http://cntr.royalroads.ca/</p>

Key questions	Comments/notes/actions	Resources
<p>43. What are the implications of NTFR-related activities for Community Forest liability?</p>	<p>At this time, community forests are not able to exclude NTFR harvesters, except possibly in active logging zones. Under these circumstances, CFs cannot be held liable for ‘uninvited’ harvesters any more than any other timber licensee operating on Crown land.</p> <p>What is less certain is the potential liability incurred by setting up a NTFR buying station operated by the CF, or even providing information to harvesters guiding them to specific sites.</p> <p>Prior to any involvement with NTFR harvesting, the CF is advised to consult with a WorkSafe BC representative to clarify your rights and responsibilities as a community forest organization and as a harvester. With the understandable concerns over liability, the CF may wish to post “harvest at your own risk” signs at potential access points for NTFR harvesters.</p>	<p>A more detailed examination of the liability issue is provided in <i>Non-Timber Forest Product Development: Opportunities and Constraints in BC’s Community Forests</i>. Available soon from http://cntr.royalroads.ca/</p> <p>WorkSafe BC ‘s website is found at: http://www.worksafebc.com/default.asp</p>
<p>44. What is the potential for developing a resource management regime that supports the compatible management of timber and non-timber resources?</p>	<p>An emerging area in managing for NTFRs is a concept known as compatible management. Compatible management is managing forest lands in a way which recognizes and enhances both timber and non-timber values. There are numerous opportunities for compatible management that would demonstrate real leadership in accounting for timber and non-timber values in forest management.</p> <p>Review your planned NTFR development activities against timber management plans. What opportunities are available to enhance values for both resources? See the compatible management guide for a detailed discussion of managing for both timber and non-timber resources on the same land base.</p>	<p><i>Incorporating non-timber forest products into sustainable forest management: an overview for forest managers</i> http://cntr.royalroads.ca/files-cntr/Incorporating%20NTFS-Ps.pdf</p>