



Key Steps in Starting a NTFP-based Business

Non-timber forest products (NTFPs) have provided nourishment, medicines, housing and transportation for thousands of years to Aboriginal Peoples. In the more recent past, many products have supplemented incomes for families and farmers. Products such as maple syrup, Christmas trees and wild blueberries have become major commercial NTFP products. Many others have developed in local or regional markets and an under-ground economy in NTFPs has flourished especially in rural and northern Canada. Collectively, these products have an estimated market value of \$1 Billion per year in Canada.

*As the market expands, there is opportunity for a wide range of new entrepreneurs to develop NTFP businesses. However, starting a new business is complex and the NTFP sector has inherent added layers of complexity. **Entrepreneurs who wish to become involved in NTFP production should be aware of the many steps that need attention in developing a successful NTFP enterprise.***

Step 1: Developing a Strategic Business Plan

The commercial production of NTFPs, at any scale other than for personal use or at a hobby level, requires careful planning and wise investment. It is essential that a new NTFP entrepreneur develop a business plan that considers the many variables and costs related to NTFP development. Elements of a good Business Plan include: understanding the resource base; the land base for supply; production and harvest data; processing facilities; transportation; human resources; sales and market demand including projections; capital investments for land and buildings; marketing strategy; and health, safety and environmental issues.

Step 2: Understanding the Resource Base

The *Resource Base* is critical in the establishment of a successful NTFP business. A NTFP entrepreneur must not only be knowledgeable about the product(s) that they wish to produce and market but also about the resource base from which these products are to be obtained. Land ownership and/or access to land are critical elements in the planning and decision-making process. Different situations present choices and options with regards to establishing and expanding NTFP enterprises.

OWNERSHIP OF LAND

Farmers and landowners with marketable non-



timber forest resources on their land have the option to harvest, process and market those products to local consumers at the farm-gate and at farmers markets, or through internet sales to a broader consumer market. If excess quantities are available, landowners may sell in bulk to other processors and wholesalers. Maple syrup producers, Christmas tree producers, and wild berry producers are typical of this group.

PRODUCTION BY PURCHASING FROM OTHER LANDOWNERS

In addition to producing crops from land under their control, farmers/landowners have the option of buying raw materials from others. Fixed price contracts will help to reduce the risk of price fluctuations.



Photo by: Wendy Cocksedge

ENHANCED PRODUCTION OF WILD CROPS

For some crops, the farmer/landowner can consider cultivation or enhancements to forest land to increase NTFP crop productivity. For example, maple woodlots can be thinned to stimulate sap production; wild blueberries can be grown on land where competing vegetation has been controlled; and openings can be made in a forest to encourage hazelnut production. These more capital and labour intensive options must be evaluated against production increases.

INTENSIVE CULTIVATION OF WILD CROPS

Based on current knowledge, not many forest based crops seem to lend themselves to large scale intensive cultivation. Only a few NTFP products such as Christmas trees, wild blueberries, cranberries and fiddleheads are presently intensively grown under modified growing conditions such as plantations. This option is capital intensive but helps to increase yields, potentially reduce harvesting costs and can produce a more secure, sustainable supply of raw materials

CROWNLAND AND BUYING FROM PICKERS

NTFP producers have found that harvesting from provincial Crown lands gives them access to a much greater land base for desired raw materials and products such as wild mushrooms, fiddleheads and berries. While there are no capital costs for land rental or purchase, there are costs for transportation of the harvest to a processing location as well as costs for collection. In Saskatchewan and Quebec, permits are required for the collection of NTFPs for commercial trade. Royal Roads University has published a [guidebook](#) with assistance from the Province of British Columbia which discusses these options in relation to land ownership and tenure.

Harvesting from Crown land is the basis for much of the NTFP sector in Canada with literally thousands of harvesters/small entrepreneurs involved. Pickers sell their products, usually unprocessed, to buying stations, processors, and others. Often “buyers” set up temporary “buying stations” to purchase from pickers. This system enables collection across a wide area and helps to reduce the costs of production but it also has some issues.

1. Pickers are not trained in plant identification and may collect the wrong species, or may collect the desired species but not of the required quality. The open-access nature of most Crown land can lead to over-harvesting and



- potential impacts on long-term sustainability.
2. Pickers are at the mercy of climatic variation and its impact on crop yields. This leads to risks for buyers who are dependent on securing a specific quantity/volume of plant material for processing or selling. Fluctuating prices on both a seasonal and annual basis due to available supply makes it difficult to guarantee prices to purchasers and consumers.
 3. Because pickers are collecting over an expanse of land without general supervision, it becomes difficult to determine the origin of raw materials. This prevents the buyer from assuring consumers that they are getting a product from a desired location and from sustainably managed forests with specific qualities and properties. Pickers are not always aware of environmental conditions and may harvest products from contaminated sites.

Any of the options described above are available to new NTFP entrepreneurs. Understanding the resource base and how it can be accessed is an essential part of the business planning process and closely linked to all other decisions.

Step 3: Production and Harvesting Considerations

Once the NTFP product(s) are selected and the availability of the source area has been determined, it is useful to develop estimates of how much raw material will be required for estimated production.

ESTIMATING CROP YIELDS

Plants and fungi often grow in localized ecosystems with distribution extremely variable depending on soils, climate and competition from other plants. As a result, it can be difficult to estimate yields per plant and even more difficult to estimate yields per hectare of land.

Many producers develop anticipated yield data based on experience. Little information is available to potential new NTFP entrepreneurs although some generalized data is available for specific plant species (see [Brigham et al 2010](#)), Newsletters of the National NTFP Network of Canada <http://ntfpnetwork.ca/> and the web sites of several provincial governments, organizations and associations such as the [Canadian Christmas Tree Growers Association](#). [The Rural Opportunities Network](#) will be compiling information on possible inventory techniques for non-timber forest resources.

Cultivation of plants provides a greater ability to develop expected yield data, but not all NTFP species are adaptable to cultural manipulation. Some species are affected by seasonal changes and this can significantly impact the quality of the final product. For example, research is underway on Canada yew which is used to produce the cancer drug Taxol™. This is a high value crop that is at risk of over-harvesting in central and eastern Canada. Information about expected yields and seasonal effects on plant chemical components is now paving the way for development of a new NTFP industry in northern Ontario ([Noland et al, 2011](#)). However, research is expensive and time consuming and few research agencies exist in Canada with the funding or mandate to conduct research on NTFPs.

KNOW YOUR CROPS

NTFP entrepreneurs should try to obtain as much information – including published yield data – as possible for their target species. In addition to yield per hectare, there can be great variations in yield after processing. For example, maple and birch sap varies in sugar content and this affects not only yield of syrup but also grade and quality of syrup. Insects, diseases and climatic variables such as frost and drought all impact crop yields and a knowledge of these factors can help entrepreneurs make adjustments to scheduling, market projections and in some cases planning treatments to minimize the impacts.



Step 4: Understanding Market Demand

ESTIMATING DEMAND BASED ON RELIABLE DATA

A successful entrepreneur needs to have a good understanding of his market and the demand for his products in order to be able to minimize risk and plan future investments. Farm-gate sales and farmers markets may provide a reasonable estimate of location specific market potential. However, beyond the local scale, there are no reliable statistical data collected for sales of most NTFPs in Canada.

Production data can be used to provide some indication of current market consumption but they are not relevant for specific locations and do not indicate the type of markets that are consuming them. For example, some production data is available for maple syrup, Christmas trees, blueberries and wild mushrooms from a variety of sources such as [Agriculture and Agri-foods Canada](#) and provincial governments, but these sources are not available on a timely basis and are not source verified. Similarly, some provincial and national grower associations provide limited production data but this usually reflects the production of their member producers and does not give a full accounting of total production.

ADJUSTING SCALE OF PRODUCTION BASED ON MARKET SUPPLY AND DEMAND

Reliable data for sales, production and market demand are important in planning for production levels, planning capital requirements for expansion and for signing of contracts. Knowledge of what other producers are producing or planning to produce is important for long-term planning. Unfortunately, this type of information is in short supply for NTFPs. You will have to 'triangulate' information from multiple sources (producers willing to speak to you, buyers, etc.) if you are to get a decent

picture of what's going on in the industry. New

sources of cheaper supply can significantly impact businesses. For example, during the past 10 years the world-wide market demand for wild low-bush blueberries was perceived to be increasing dramatically with new information about the important nutraceutical properties of blueberries. Prices climbed dramatically as demand increased and this prompted several new sources of wild blueberry production to be developed in Canada and expansion of existing production sites. However there was no sound production data available to assess competition nor was there reliable market demand data collected. Increased production in Canada, and increased high-bush blueberry production in the USA and South America resulted in a dramatic reduction in market prices even while overall sales volumes continued to increase ([Wooley 2012](#))

Step 5: Developing a Marketing Approach

THE BASIC ELEMENTS OF MARKETING

Regardless of the size of the business, it is essential to develop a marketing plan to guide your sales strategies. A critical element of a marketing strategy is to determine the products that are going to be produced and the market niches into which they will be sold. For example, wild blueberries can be sold as fresh or frozen blueberries, but there are also a wide variety of value-added products that can be produced from blueberries.

There are several elements to product marketing that must be considered. Product quality is an important part of any marketing strategy. A decision to produce an upscale high quality product can increase production costs or require higher quality processing of the raw materials. This can impact pricing options and market niches. Product packaging then needs to reflect the expectations of the target market niche.



Product pricing is obviously dependent on production costs, but is also influenced by market demand, competition, and on the desired market niche(s). At a basic level, if the price is set low, it can increase demand but the profit margin per unit decreases. If the price is set high, it may not sell as many units but it returns a higher profit per unit.

Promotion and advertising are essential for commercial success since they can increase commercial exposure and increase market sales. Promotion can be done through several channels including commercial advertising, social media and through direct contact with potential customers. It is critical that new entrepreneurs conduct as much early market analysis as possible so that promotion and advertising can be targeted to the market niche best suited to the product.

Sales and distribution of NTFP products can be done through several channels but they need to be carefully considered. If a decision is made to sell direct to retail market, then the producer must be prepared to do the sales themselves or hire sales staff. Alternatively if there will be bulk sales to wholesalers then pricing and packaging options become important considerations. If selling direct into the retail market, branding may be an important consideration. Please see the [Alberta Agri-preneur](#) document for more information. Chain of Custody certification of specific products such as maple syrup enables the entrepreneur to market products as source verified from a sustainably managed forest. Please see the [Smartwood Certification Standards](#) for NTFPs for more information. The Canadian On-Farm Food Safety Program (COFFS) has supported the development of [Good Agriculture and Collection Practices](#), a voluntary program that covers NTFP harvesting and helps assure consumers of the safety of wild foods and natural health care products.

Step 6: Assessing the Need for Capital

Once decisions are taken about how the raw material is going to be obtained, consideration must be given to developing and financing the Infrastructure required to process and transform the raw material to final product.



CLE photo

Because of the perceived risk in the production of NTFPs, the availability of capital is often limited or costly to obtain. Many NTFP producers report difficulties in obtaining capital since traditional lending agencies have limited knowledge about the NTFP sector. The functional foods and nutraceutical products industry has already started to examine options for obtaining needed capital ([Cranfield et al 2006](#)) Alternatives to purchasing include leasing of equipment and machinery. [Farm Management Canada](#) has developed a series of webinars to help farmers examine best options for business planning, including lease or buy.



COOPERATIVES AND SHARING KNOWLEDGE

Capital is required for start-up, for land development, and for all phases of operation. The sharing of common goals and roles through the establishment of a cooperative is of increasing interest to NTFP producers across Canada. Through a cooperative, members share knowledge and common services in order to make their production more efficient and effective. Cooperatives also can have access to larger sources of potential funding. Agriculture and Agri-foods Canada has developed a [program to assist in the development of cooperatives in Canada](#).

Step 7: Human Resources

An essential part of a business plan is planning for the human resources you need for each stage of the product supply chain. For example, a farmer or landowner may choose to perform a majority of the field activities each season such as inventory of crop plants or adjustments to forest stand structure to encourage specific species, but employ family members or seasonal employees for collection and processing during the peak season. As a business expands, alternative approaches may be required. For example, the decision might be made to buy raw materials from seasonal pickers rather than growing larger volumes or hiring more employees. An ongoing concern across Canada is the shortage of trained seasonal employees for crops such as blueberries and Christmas trees (see the [New Brunswick Wild Blueberry Plan](#) for more information).

An important component of a human resources strategy is to determine what health and safety issues are relevant to all stages of production. Federal and provincial legislation exists for the use of pesticides, the use of a wide variety of machinery and equipment, and for labour conditions.

Step 8: Legislation

There is a range of federal and provincial legislation that can potentially impact NTFP producers. [Species at Risk Acts](#) can impact how landowners manage their properties to ensure certain species are protected. The Canadian Food Inspection Agency has responsibility for the movement of plants under the [Plant Protection Act](#) to control the spread of invasive insects and diseases. This legislation not only affects products moving internationally but also inside Canada within Quarantine zones. For example, it impacts the movement of black ash logs in eastern Canada to halt the spread of the Emerald Ash Borer. Black ash logs are used by the Mohawks of Akwesasne for the making of ash baskets treasured as functional products and as beautiful art; obtaining quality logs is challenging due to the legislation in place.

Although provincial legislation focused on NTFPs remains rare, there is specific legislation focused on NTFPs in Saskatchewan and in provinces including Ontario and Quebec. Check with provincial authorities to identify relevant legislation for your business.

Step 9: Case Studies

Awareness of NTFPs and their role in the economy has expanded significantly over the past two decades. Consumer oriented databases such as [Buy BCwild](#), [From Our Atlantic Woods](#) and [Manitoba Wild](#) enable NTFP producers to share knowledge and reach new markets. Case studies such as provided by the [large-scale commercial wild blueberry](#) business in northern Ontario provide an in-depth examination of the many steps and information required in developing a NTFP-based business. Further case studies will be available on the Rural Opportunities Network in 2013.