BRITISH COLUMBIA

AGROFORESTRY STRATEGIC PLAN

2003 - 2008

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What is Agroforestry?

Agroforestry is a management approach that integrates familiar and new agriculture and forestry practices into land management systems in a manner that contributes to diversification and sustainability of production. The Agroforestry industry in BC is an emerging sector, composed of stakeholders from a variety of sectors, backgrounds and regions who wish to take advantage of the environmental, economic and social opportunities presented by adopting Agroforestry systems into their land base.

Our vision is:

A dynamic, self-sustaining Agroforestry industry integrated with land management strategies providing economic, social and environmental synergies that contribute to the diversification and stability of the Agri-Food industry in British Columbia.

Our mission is:

To coordinate and enhance the integration of Agroforestry production systems with current land management practices, ensuring an economically sustainable and environmentally beneficial, stable, and self-reliant Agroforestry industry in British Columbia. These practices will provide quality food and non-food products to the consumer.

We will accomplish our vision and mission by:

- ⇒ developing strategic Agroforestry partnerships;
- ⇒ increasing education and access to information;
- ⇒ developing and diversifying markets and links;
- ⇒ developing an Agroforestry Market Strategy

EXECUTIVE SUMMARY

Purpose

This document outlines the formulation, implementation and evaluation of actions, which will enhance and increase Agroforestry activities in British Columbia. The ultimate long-term objective is a self-sustaining, dynamic Agroforestry industry, which contributes to the stability of the Agri-Food Industry in British Columbia.

This plan builds upon an existing interest in alternate crops and cropping strategies within the province, and an increasing interest in niche markets and direct marketing strategies. It is derived from comprehensive consultation with existing and potential Agroforestry practitioners. Through the consultation process it was determined that the Agroforestry Industry stakeholders are a very diverse province-wide group, employing a range of production practices and producing a large variety of crops and crop types. Stakeholders are both full- and part-time producers operating at various scales of size and intensity. There is a high degree of expected continuity of family operations within the community and an active interest in integrating Agroforestry systems into their land management practices.

The primary anticipated outcomes of this strategic plan will be development of a vibrant industry stakeholder group composed of existing and new practitioners; a strong, self-regulated commercial industry providing consumer confidence in production practices and products; and, identification of Agroforestry products with environmentally sound management systems. Integration of these systems with current production practices will in turn play an integral role in promoting regional and national perceptions of a diversified, sustainable agri-food industry in BC.

Background

Agroforestry is both a land management approach and an industry defined by the production systems employed. As such it spans the breadth of the agri-food industries in BC. Through the implementation of Agroforestry initiatives, land stewards combine the production of agricultural and forestry-based crops in an economically viable and sustainable manner.

Environmental benefits are a product of the increasing diversity of structure and species across the landscape resulting from the introduction of Agroforestry systems into current land management practices. Agroforestry systems can also provide solutions to management issues such as interception of non-point source pollution; reductions in odours and increasing slope stability.

Economic benefits result from additions of new crops that diversify overall production, cash flow and labour allocation.

Social benefits include the social aspects of increasing biodiversity and improving environmental stewardship; and, the community and sector aspects of increasing the diversity of work, timing of production practices and products produced.

Through diversification of practices, products, income and labour agroforestry systems augment risk management targeting a decreased reliance on Federal and Provincial safety-net programs.

Strengths and Opportunities

The chief strengths and opportunities identified for the Agroforestry industry are:

- Agroforestry systems provide an opportunity for sustainable production through management - as opposed to unregulated harvest.
- Sustainability and protection of the environment were identified as key issues for implementation of new systems by stakeholders.
- Integration of Agroforestry systems with current management practices diversifies income source, cash-flow, and labour resulting in increased operation stability which in turn is reflected in increased community and sector stability.
- Agroforestry practices augment risk management by diversifying income and labour; contributing to sector stability; remediating and preventing environmental concerns; and, expanding social benefits.
- Integration of Agroforestry systems across the landscape increases species richness, species evenness, structural, temporal, and landscape level biodiversity.
- Agroforestry products are often non-commodity products sold into niche markets, the sales of which are often direct to the consumer, who is a portion of the public majority living in dissociation from the primary agricultural and forest-based production areas. This provides the opportunity to increase awareness and understanding of managed systems and their contributions to environmental health and wellness.

Costs and Cost Sharing

Agroforestry is an emerging industry composed of subsets of current production and experiential-based agri-food and forest industries. As a result, significant challenges and opportunities are apparent in developing self-funding mechanisms. The 50:50 cost sharing strategy of the Agri-Food Futures Fund will be met within the time frame of this strategic plan. It is anticipated that with industry development over the implementation period of the strategic plan and the initiatives therein, an increasing portion of funding will be available from the industry stakeholders. Thus the proposed weighting of funding accounts for a higher contribution from the AFFF in the initial phases of the strategic plan and a decreasing contribution in the latter phases.

Implementation and Performance Measurement

As the AFFF is a source of matching funds targeting risk management, the implementation of the strategic plan focuses on risk management strategies. On the broadest level, industry development itself is a long-term risk management strategy increasing the stability of the larger agri-food sector through diversification and

expansion. Implementation of this plan fosters risk management strategies for Agroforestry by facilitating development of strategic partnerships, increasing stakeholder knowledge and skills, linking supply and demand and developing a long-term marketing strategy. At the landscape and practitioner level, integration of Agroforestry systems with current management practices augments risk management by diversifying income and labour; contributing to operation viability; mitigating environmental concerns; and, expanding social benefits.

At this stage of the strategic planning process goals for industry development and the strategies to achieve them have been established. Performance targets and schedules for completion have been delineated to ensure realization of the actions required to meet the recommended strategies and achieve the strategic plan goals.

Expected Achievements

This strategic plan creates a specific identity for Agroforestry in British Columbia, It delineates who the stakeholders are and will likely be in the future. It defines the current position of the Agroforestry industry in terms of development, the challenges facing the industry, and the benefits inherent in the successful achievement of our goals and objectives.

Through the implementation of this five-year strategic plan:

- Partnerships between stakeholders, other agri-food industries and affiliated agencies will be fostered and developed.
- There will be an increased awareness of Agroforestry systems and activities, and the economic, social and environmental benefits derived from them.
- A network of demonstration farms and agroforests will be established and provide the basis for research, demonstration, and education.
- There will be an increased awareness of and access to markets and business opportunities.
- An Agroforestry identity will be established in British Columbia, synonymous with economically sustainable and environmentally beneficial systems and products
- An effective, multi-faceted Agroforestry product marketing strategy will be developed and implemented.
- The information necessary to the iterative process of evaluation and assessment will be employed in 'mid-course' adjustments within this plan and as the basis for the next strategic planning period.

Funding from the Agri-Food Futures fund will contribute to the implementation of the actions outlined in this strategic plan. These actions form the base activities and initiatives required for the emerging Agroforestry industry to become a self-reliant dynamic presence in the British Columbia agri-food sector.

Table of Contents

1 Purpose

This document is the BC Agroforestry Strategic Plan (2003 to 2008). It has been prepared for consideration under the auspices of the Agri-Food Futures Fund (AFFF). The AFFF is a cost-sharing trust fund whose goals are the development and sustainability of the agri-food industry in British Columbia. The integration of Agroforestry production systems into current land management practices will help further the AFFF objectives of: facilitating growth and development of an emerging sector; facilitating a more viable and stable agri-food industry concomitant with increasing environmental stewardship; and improving product quality assurance. The Agroforestry Strategic Plan was authored using direct input from current and potential agroforestry practitioners. As such it identifies those areas and issues which need to be addressed for development of Agroforestry from an emerging industry sector into an established, self-reliant commercial industry. The primary changes wrought in this emerging industry by implementation of the strategic plan will be development of a vibrant industry stakeholder group composed of existing and new practitioners; a strong, self-regulated commercial industry providing consumer confidence in production practices and products; and, identification of Agroforestry products with environmentally sound management systems. Integration of these systems with current production practices will in turn play an integral role in promoting regional and national perceptions of a diversified, sustainable agri-food industry in BC.

The AFFF is an initiative under the Canada – British Columbia Framework Agreement on Agricultural Risk Management as are several other familiar farm programs such as the Net Income Stabilization Account (NISA), Crop Insurance, and the Canadian Farm Income Program (CFIP). As such, the strategies and activities of this plan are intended to comply with the principles of the framework agreement as well as the principles of the Canada – British Columbia Agricultural Risk Management Companion Program.

This plan outlines the formulation, implementation and evaluation of actions, which will enhance and increase Agroforestry activities in British Columbia. The ultimate long-term objective is a self-sustaining, dynamic Agroforestry industry which contributes to the stability of the agri-food industry in British Columbia. This document outlines how this goal will be achieved by presenting and defining:

1. the Agroforestry industry;
2. the current state of BC Agroforestry;
3. our goals;
4. the actions required to achieve these goals; and
5. the milestones to measure our success.

Supplemental information to this strategic plan is presented as an Appendix under separate cover.

2 Introduction

2.1 Defining Agroforestry

Industries are characteristically defined by the products they produce, or the experiences they provide. In contrast, Agroforestry is an industry defined by the production systems employed. As such, it may be viewed as being composed of subsets of BC's agri-food industries. Agroforestry does not convert agricultural land to forests or forested lands to agriculture. Rather, it is an approach to land management that spans the breadth of the industries of each, integrating with current land management practices to produce both familiar and novel crops. As a formal definition, Agroforestry may be regarded as the synergistic integration of both agricultural and forestry practices and products resulting in optimal management of land, animal and human resources.

Agroforestry spans the breadth of BC's Agri-food and forest-based industries.

The Agroforestry systems suitable for temperate climates include intercropping or sun systems (alley cropping), silvopasture, shade systems (forest farming), timberbelts and windbreaks, and integrated riparian management (riparian forest buffers). The BC Ministry of Agriculture, Food and Fisheries (MAFF) has identified all of these as valuable practices for adoption in British Columbia.

Agroforestry is the synergistic integration of agriculture and forestry practices.

Agroforestry systems are actively managed systems that are:

- ✓ **Intentional** designed and managed for a planned result;
- ✓ **Intensive** all components are intensively managed;
- ✓ **Integrated** a blend of agriculture, forestry and environmental science;
- ✓ **Interactive** designed to minimize negative and maximize positive interactions between trees, other crops, livestock and humans.

SHADE SYSTEMS

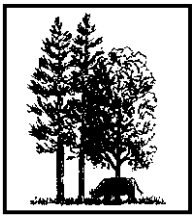
Include: *shade agroforests & forest farming*

Involve: forested systems and management of both the trees and shaded understory to produce both timber and non-timber crops (e.g. manipulation of the tree canopy in a woodlot to enhance salal or fern production for floral sales as a secondary crop).

SUN SYSTEMS

Include: *sun agroforests & intercropping or alleycropping*

Involve: non-shaded systems which typically involve the planting of trees or shrubs between areas of crops which require full sun, to produce both tree/shrub crops and field crops (e.g. landscape trees or shrubs intercropped with a grain or vegetable crop or hay).

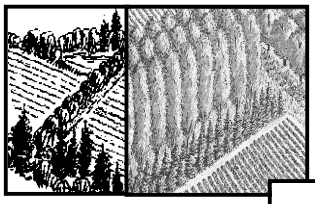


SILVOPASTURE

Include: grazing on pastures with active management of tree crops

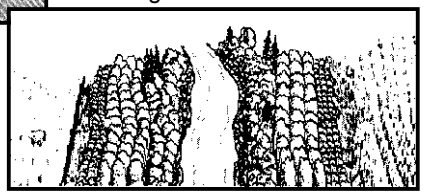
Involves: combined management of trees with forage and livestock production (e.g. Christmas tree plantation with cattle grazing).

TIMBERBELTS



Include: *timberbelts, windbreaks, fenceline plantings, hedgerows*

Involve: rows of trees and/or shrubs planted for both tree/shrub harvest and environmental benefits (e.g. timberbelt of poplar, spruce and red stem dogwood for wood fibre and florals).



INTEGRATED RIPARIAN MANAGEMENT

Involves: management of areas bordering lakes, streams, rivers etc; to enhance and protect aquatic resources and generate income from products (e.g. planned buffer for selected tree harvest, and harvest of florals and medicinals).

ASSOCIATED PRACTICES

Example: woody crop production for wood and fibre, carbon sequestration, odour reduction, waste management

2.2 The Benefits

Agroforestry systems can be adopted at varying scales of intensity, time frame and size of operation making it attractive to both established and new practitioners. Adoption of the systems may be for a combination of economic, environmental and social reasons.

Economic: Agroforestry systems increase farm or agroforest profitability by adding new crops that increase and diversify production and cash flow. For example, in a managed riparian area the combined output of selectively harvested trees with a medicinal, food or floral crop in the understory may yield a higher or equivalent value output than cropping to the stream edge.

Increased profitability and enhanced environmental protection.

Environmental: Agroforestry systems can provide protection for or remediation of environmental concerns, protection for livestock and a filter effect for noise, dust and odour pollution. For example a managed riparian area can result in reductions in non-point source pollution, shading of the stream by the tree component, and bank stabilization.

Social: There are many examples of the social benefits of integrating Agroforestry systems across the landscape including increasing biodiversity, the social aspects of improving environmental stewardship and the community and sector aspects of increasing producer stability. An important and timely benefit is the increase in carbon sequestration possible through changes in management practices and additions of trees and shrubs to management systems.

Increased stability of communities and the agri-food industry.

Economic, environmental and social benefits can rarely be isolated from one another. Production practices and products are integrated within a system as are the benefits. At the landholder level, Agroforestry is a set of practices that provide strong economic and conservation incentives. At the community level, Agroforestry systems help attain more diverse, healthy and sustainable landscape-level land-use systems. Product diversification results in supplementary sources of income added to the existing resource base. This in turn results in a more stable producer population within the community leading to a more stable association of communities and the agri-food industry. The feedback mechanism inherent in this process is that a stable and viable sector is a necessity for implementing and achieving the desired environmental stewardship goals.

Diversification of income and labour.

Contribution to sector stability.

Remediation and prevention of environmental concerns.

Expansion of social gains.

MINIMIZE RISK

3 The Strategic Planning Process

During the planning process BC literature pertaining to Agroforestry and related activities was compiled and assessed; extension activities were examined and academic initiatives explored.

Over the past several years many studies and reports have been completed pertaining to Agroforestry. These include reports identifying issues, responsibilities and opportunities (DeGeus 1993); identification and development of alternate crops (Gunner 1998); evaluations of economic strategies (Draeseke 1998; Wills and Lipsey 1999); and implementation of Agroforestry systems (Small Woodlands Program 2001). Interest by stakeholders in Agroforestry systems is evidenced by attendance across the province at workshops directly relating to Agroforestry, as well as the introduction of two Agroforestry courses at the University of British Columbia. Literature and references used in the preparation of this strategic plan are cited in Section 10.

As a result of the growing interest in Agroforestry systems and the opportunities presented, a questionnaire was implemented to ascertain the identity of the industry stakeholders, the current condition and outlook for Agroforestry in British Columbia, the industry goals and the means of achieving those goals. The target audience was composed of two groups: 1) current Agroforestry practitioners and participants; and 2) farmers and woodlot owners who are not currently implementing Agroforestry systems on their land base, but may derive benefits from integrating the systems into their current management practices. It was important to identify and solicit input from not only current practitioners, but also from those that could be interested. Equally important was obtaining comment and gaining an understanding of perceptions from those individuals not employing Agroforestry practices in their management systems – either as a result of being unaware of Agroforestry opportunities or for other reasons. The questionnaire was advertised in major trade newspapers and through list servers on the internet. Comments were solicited from existing and potential practitioners through the questionnaire, which was mailed out to 1000 individuals from across British Columbia. Response rate was 18% on a single-point contact. Preliminary discussions with associated stakeholders[1] indicated results from the questionnaire were consistent with qualitative observations of trends. Ongoing consultation with practitioners, associated stakeholders and affiliated agencies during implementation of the strategic plan will ensure projects are responsive to the needs of the industry.

> This strategic plan is derived from comprehensive consultation with existing and potential Agroforestry practitioners.

[1] Individuals and agencies neither directly producing nor buying Agroforestry products, but concerned with areas relating to the field of Agroforestry e.g. resource professionals, educators, researchers, etc.

The Agroforestry Questionnaire collected information from producers regarding their background information, current knowledge of and interest in Agroforestry, perceptions of opportunities for and limitations to Agroforestry, market information, sources of information used for land management and types of projects considered essential.

The questionnaire collected similar information from buyers regarding region of operation, types of products bought, degree and sources of competition, and types of products they would buy in greater amounts. Information collected included perceptions of those products showing the greatest amount of potential for development, types of sales conducted and relative importance of various factors in decisions of product purchase. The final question related to the priority of projects buyers identified as essential. A copy of the questionnaire can be found in Appendix 1. A summary of the responses is presented in Appendix 2.

Optional contact sheets were provided in the questionnaire package. Those individuals wishing to be kept apprised of Agroforestry activities and Strategic Plan development and implementation have been placed on a communications list.

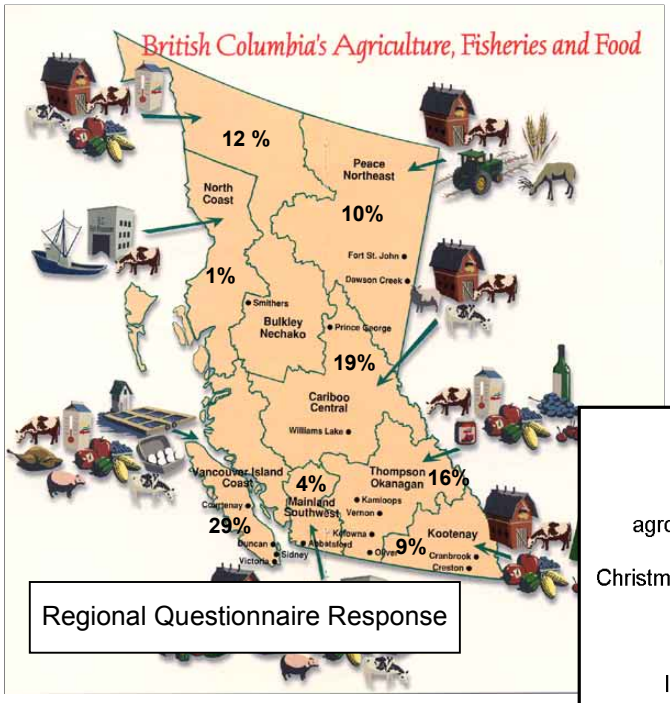
The information gained from the prior studies and reports, from stakeholders through the questionnaire, and from conversations with affiliated stakeholders form the basis of this plan.

Information Gained from the Agroforestry Questionnaire and Relationship to the Agroforestry Strategic Plan

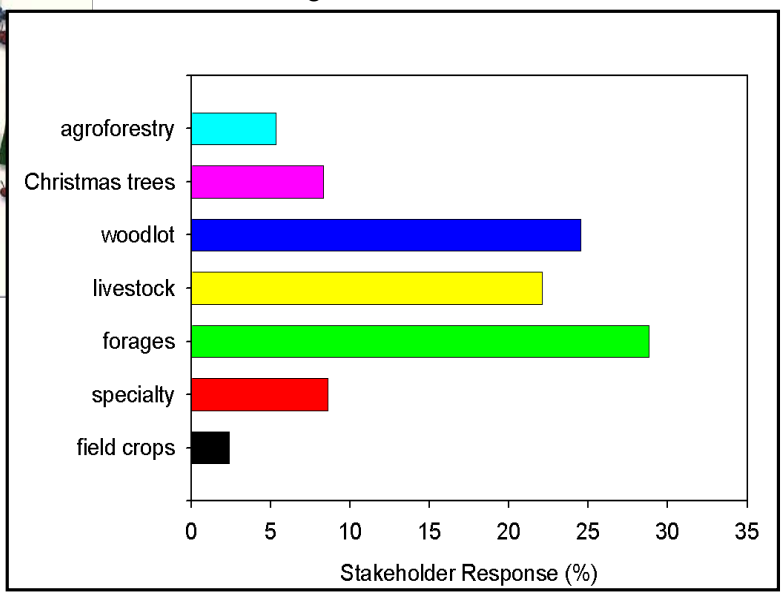
Questionnaire Information	Question Addressed
• Field of practice • Geographic region of operation • Land area operated • Age • Likelihood of continuity within the family	Who are we?
• Current knowledge of and interest in Agroforestry systems • Current land resources and possible problems • Activities occurring on the producers lands • Factors playing a role in decisions to or not to plant trees and shrubs • Products sold and contribution to income • Factors influencing decisions to enter the market place • Average income	Where are we now?
• Ranking of profitability, sustainability, protection of the environment and social acceptance in terms of importance to stakeholders. • Current Agroforestry strengths and weaknesses • Limitations to implementation	Where do we want to go?
• Types of projects deemed important to further Agroforestry initiatives. • Ranking of most important types of support services. • Requirements and linkages between agroforestry producers and consumers • Preferred extension methods of land managers • Producer organizations	How do we get there?
• Measurable and achievable benchmarks to gauge fulfillment of requirements to achieve agroforestry outcomes.	How will we know when we've arrived?

4 Who are we as Agroforestry Practitioners?

Stakeholders were identified as producers and buyers, thus they are the current practitioners and potential new practitioners of the field and include part- and full-time operations. Associated stakeholders were identified as individuals or groups not directly producing or marketing products, but concerned with the field of Agroforestry. Thus this latter group is comprised of resource professionals from the federal and provincial governments, regulators, educators, municipalities, academics, NGOs and consultants or contractors. A detailed survey of the stakeholders was implemented to further define the industry, assess the current condition and outlook for Agroforestry in British Columbia and to determine operating guidelines for the emerging industry.



- Stakeholder response to the questionnaire was from all regions of the province with 96% of the survey respondents indicating moderate to very high interest in implementing Agroforestry practices on their managed land.
- Regional interest was greatest in the Vancouver Island and Coast region and lowest in the Mainland Southwest and North Coast regions.



Stakeholder Fields of Practice from Agroforestry Questionnaire 2002

- Stakeholders currently implement a wide diversity of production practices with emphasis on woodlot operations and animal-related practices including hay and pasture. As a group, crop production (specialty crops, landscape and florals, field crops, Christmas trees) is also well represented.
- A majority of individuals indicated they produce more than one crop type, and many are involved in part-time production.

- The fields of practice in each of the regions included hay, pasture and beef for the Peace Northeast; woodlots, hay and pasture for the Cariboo Central, Vancouver Island and Coast and Thompson Okanagan; beef, hay and woodlots for the Bulkley Nechako; specialty crops in the Mainland Southwest and Christmas trees and woodlots in the Kootenays.
- A large proportion of the Agroforestry stakeholders own their land with approximately 56% renting or leasing land in addition to their property. Land management areas are quite variable ranging in size from less than 50 acres to those over 1000 acres.
- Seventy nine percent of the identified stakeholders ranged in age from 36 to 65, the largest proportion of which were in the median age range of 46-55. In addition, approximately 50% of the stakeholders felt that continuity of their land management operation within the family was likely. Of the remaining individuals, approximately 50% (~30% of all respondents) were unsure if a family member would continue their land management operation.
- A majority of the Agroforestry stakeholders reported 'farm' sale values above $10,000 annually, indicating that even part-time operations contribute a significant proportion to gross[1] income.

Farm Sales[1]	Agroforestry Practitioners[2]	Farms in BC[3]
< $10 000	36%	53%
$10 000 – $49 999	28%	25%
$50 000 – $99 999	18%	7%
$100 000 – $249 999	11%	7%
> $250 000	7%	8%

[1] Gross or net income not specified in Agroforestry Questionnaire. Gross income assumed as most conservative approach.

1 Value ranges from Statistics Canada, Census of Agriculture (Fast Stats 2000, BC MAFF).

2 Agroforestry stakeholders include full and part-time operations in agriculture and forestry

3 Operations producing at least one of the following products for sale: crops (field crops, tree fruits or nuts, berries or grapes, vegetables, seed); livestock (cattle, pigs, sheep, horses, exotic animals); poultry (hens, chickens, turkeys, exotic birds); animal products (milk or cream, eggs, wool, furs, meat); or other agricultural products (greenhouse or nursery products, Christmas trees, mushrooms, sod, honey, maple syrup products) (Census of Agriculture 2001, BC Summary, BC MAFF)

In summary, the Agroforestry stakeholders are a very diverse province-wide group, employing a range of production practices and producing a large variety of crops and crop types. Stakeholders are both full- and part-time producers operating at various scales of size and intensity.

There is a high degree of expected continuity of family operations within the community and an active interest in integrating Agroforestry systems into their land management practices.

Agroforestry stakeholders are province wide, producing a wide diversity of crops and crop types.

4.1 Our Vision

A dynamic, self-sustaining agroforestry industry integrated with land management strategies providing economic, social and environmental synergies that contribute to the diversification and stability of the Agri-Food industry in British Columbia.

4.2 Our Mission

To coordinate and enhance the *integration* of Agroforestry production systems with current land management practices, ensuring an economically sustainable and environmentally beneficial, stable, and self-reliant Agroforestry industry in British Columbia. These practices will provide quality food and non-food products to the consumer.

The mission will be achieved through the development of strategic agroforestry partnerships; increasing education and access to information; the development and diversification of markets, products, and links between them; and development of a marketing strategy.

4.3 Core Principles and Values

Agroforestry is *optimization* of combined agricultural and forestry practices, leading to greater economic, social and environmental gains and balance. The overall goal of industry development is to build upon the synergies and diversification characteristics of Agroforestry systems in concert with existing agri-food industries. Agroforestry is a modification of existing systems resulting in production of familiar (and new) crops. Therefore integration and cooperation with other producing, marketing, research and governmental groups will strengthen all of the partners and enhance the stability of the agri-food and forest-based industries as a whole. The Agroforestry Industry vision and mission will be achieved by adhering to the following principles and values:

- Human beings and the environment have inherent worth and deserve respect.
- Environmental stewardship, social responsibility and financial success are complementary goals of Agroforestry management systems.
- We are committed to problem solving, innovation, creativity and viability.
- We are committed to high product quality and production standards.
- Agroforestry systems do not replace, but integrate with current production systems used by land managers.
- Diversification of the agri-food industry through integration of Agroforestry practices and products will increase long-term farm and community stability.
- We are committed to extension and increasing access to information, thereby increasing the tools by which Agroforestry stakeholders can develop and evaluate management options which best meet their own interests, skills and resources.

4.4 Agroforestry Management Committee

Our vision will be achieved through the coordinated activities of the Agroforestry Management Committee. This working group will be similar to the Agroforestry Steering Committee.

Mr. Ted Moore and Mr. Richard Hallman of BC MAFF helped form the Agroforestry Steering Committee to oversee and provide guidance in the preparation of this Agroforestry Strategic Plan.

Members of the Steering Committee are industry representatives with an envoy of two MAFF representatives. The Agroforestry Steering Committee representatives are:

Individual	Association	Region	Area of Expertise
Mr. Harold Reedy, Chair	Industry Representative	Bulkley Nechako	Forestry, woodlot management, extension.
Ms. Jennifer Cunningham	Industry Representative	Thompson Okanagan	Sheep, woodlot management, marketing.
Mr. Lee Hesketh	Industry Representative	Thompson Okanagan	Beef, riparian management and stewardship.
Mr. Douglas Justice	Industry Representative	Mainland Southwest	Botany, horticulture and native plants.
Mr. Rick Ross	Industry Representative	Vancouver Island Coast	NTFP[2] buyer for 20+ years, familiar with a wide range of cut floral greens and wild mushrooms, wholesale marketing, harvesting.
Mr. Charlie Willis	Industry Representative	Kootenay	Christmas trees, NTFPs, and marketing.
Mr. Richard Hallman	MAFF, ex-officio	Provincial	NTFPs, riparian buffers, horticulture and Christmas trees.
Mr. Ted Moore	MAFF, ex-officio	Provincial	Silvopasture, forages, livestock and riparian buffers.

The Steering Committee members represent a diversity of industries and regions across the province, thereby providing representation for regional and sector interests. Upon approval of the strategic plan by the Investment Agriculture Foundation of British Columbia (trustees of the AFFF), the structure employed for the Agroforestry Steering Committee will serve as the model for the Agroforestry Management Committee (AMC) for implementation of this plan.

As suggested in the *Agri-Food Futures Fund – Background Information* document, it is proposed that the AMC will seek to have representation by industry representatives and ex-officio members from the Investment Agriculture Foundation (IAF), the British

[2] Non-timber forest product

Columbia Ministry of Agriculture, Fisheries and Food (MAFF) and from Agriculture and Agri-Food Canada (AAFC). The role of the ex-officio members is to provide support to organizations in establishing directions and assisting in achieving their goals. Thus the MAFF and AAFC members will act as a resource for the AMC.

There is a wide range of crops and Agroforestry management systems that span the range of climatic and edaphic characteristics of our province. Several responses received in the Agroforestry Questionnaire commented on these differences of crops and management systems among and within various regions of the province. The AMC will endeavor to have representation from across the province and production systems.

To provide this representation, AMC representatives, including the ex-officio members, will mirror the regional representation and diversity of production systems indicated in the Agroforestry Questionnaire. It is proposed that the AMC initially be composed of a minimum of six Directors plus three ex-officio members. Director representation will strive to complement the BC geographical areas. Production system and buyer representation will be sought from the agri-food sectors identified in the survey.

Administrative services will be contracted out to an established industry with an existing infrastructure. It is proposed that administrative support be handled by the Federation of BC Woodlot Associations (FBCWA).

The AMC will be formed as a committee of industry volunteers whose in-kind provision of experience and expertise constitutes the visible core of sector commitment to development of a self-reliant Agroforestry industry. The major functions of the AMC are:

- to implement the Agroforestry Strategic Plan;
- to develop and maintain strategic partnerships[3] for promotion of Agroforestry in British Columbia;

The details of the Agroforestry Management Committee structure and proposed operating practices are found in Appendix 4.

It is recognized that with development of the Agroforestry “industry” the committee structure and function will be refined to reflect membership and the needs thereof.

[3] Strategic partnerships are partnerships with people or agencies contributing money, land or expertise resources to development of Agroforestry initiatives.

5 BC Agroforestry Profile

5.1 The Larger Context and Background

Agroforestry is composed of a subset of the agri-food and forest-based industries in British Columbia. A brief description of the size of the BC agri-food industry and the woodlots in the province can be found in the appendix. In essence the farm and woodlot industries contribute a significant proportion of revenue and practitioners to the province. Thus the integration of Agroforestry systems with farm and woodlot activities can have a very positive impact on contributions of these industries to British Columbia, and stability of communities across British Columbia.

Agroforestry in British Columbia is arising from an escalating interest in alternate crops and cropping strategies. A large number of reports have been published on non-timber forest products (NTFPs), many of which can be grown and harvested from managed Agroforestry systems. Agroforestry systems provide an opportunity for sustainable production through management, addressing some of the concerns associated with unregulated harvest. Further details may be found in the appendix.

In BC there is escalating interest in alternate crops and cropping strategies.

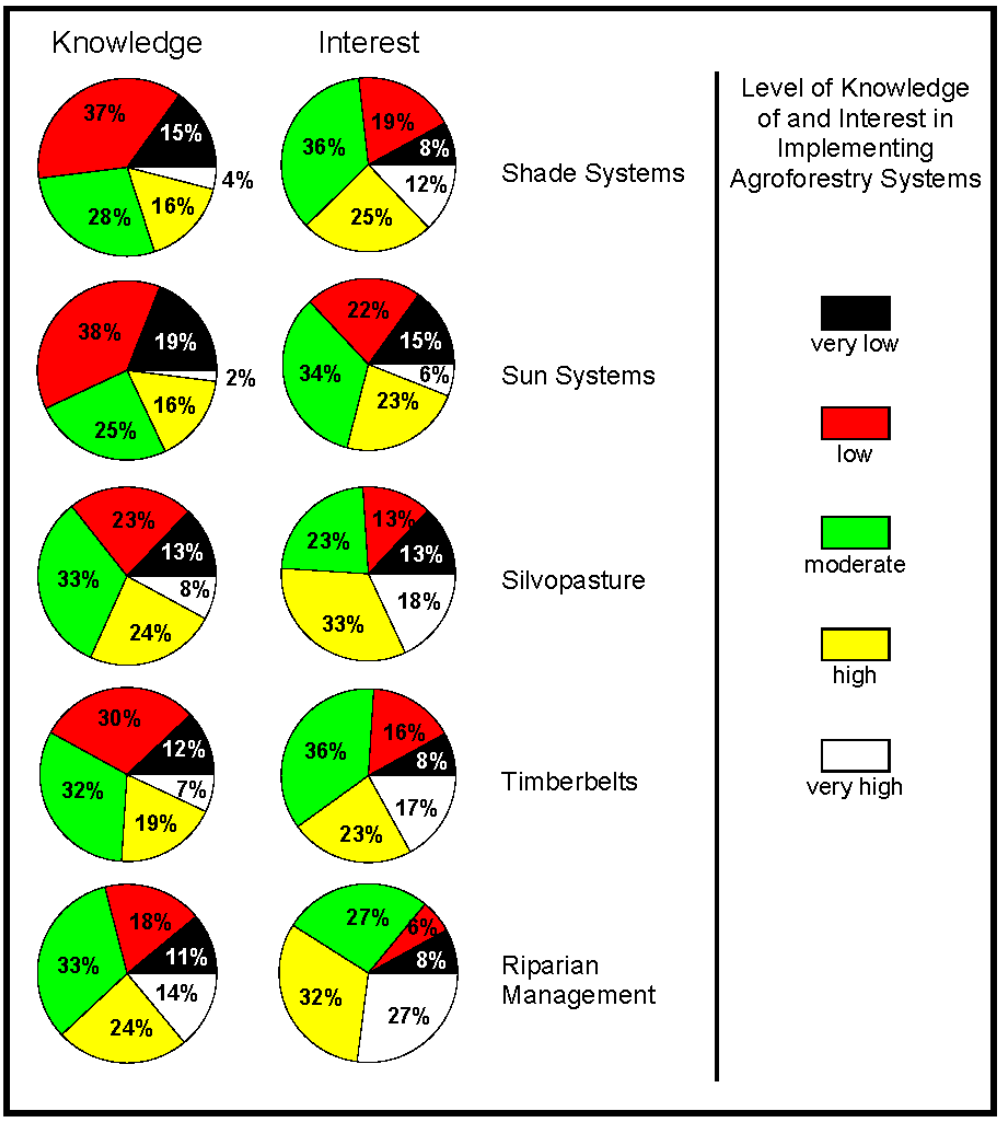
Agroforestry related activities have been market driven and supported by extension.

Associated with the interest in alternate crops and cropping strategies has been a high degree on interest in Agroforestry extension. The BC MAFF has conducted Agroforestry seminars and workshops across the province for approximately 5 years and participated in numerous projects in which expert consultation was required. In addition an Agroforestry course has been offered at UBC for the past 3 years and a web-based practitioner-oriented course is currently being launched. Further details may be found in the appendix.

Thus, the identification of Agroforestry as an emerging industry has been gaining momentum through both market-driven and extension-driven activities.

5.2 Current State of Agroforestry and Resource Management

Percentages of stakeholders indicating levels of their current knowledge of Agroforestry systems and interest in implementation.



As identified in the Agroforestry questionnaire, there was generally:

- low to moderate levels of knowledge of Agroforestry systems; and
- moderate to high levels of interest in implementing them.

Overall, producers were:

- most *familiar* with riparian management systems and silvopasture; and,
- most *interested in implementing* riparian management systems followed by silvopasture, timberbelts and shade systems for production.

Stakeholders have a high degree of awareness of alternate resources on their land including botanicals, craft products, edibles, seed and landscape plant production, mushrooms and wood products. However, other than wood and wood products they are unfamiliar with how to manage, make use of or market those resources. Thus, provision of education for stakeholders in implementing Agroforestry production systems and marketing alternate products is a priority.

There is a high awareness of alternate resources and a low knowledge level of how to manage and market them.

Approximately 50% of stakeholders responding to the questionnaire sold products not related to their primary occupational focus. Firewood and trees for timber or wood fibre were the products sold most frequently indicating diversification opportunities in the remaining product areas. Stakeholders are actively producing and selling all categories of products listed above indicating existing interest and markets, which may be further developed and expanded.

Opportunity for diversification of existing and potential products and markets.

Perceived problems occurring with the highest frequency on producer's land related to economic impacts, for example the loss represented by wildlife damage to crops, insects and disease and loss of trees on land. Timber owners might find the value of their investment declining over time, while the economics of reforestation or remediation of the problem may not be feasible. The integration of Agroforestry systems and the resulting diversification of products and labour activities may provide the additional cash flow required for overall sustainability of the production system.

Economic impacts from reductions in crop production and quality are the largest uncertainty in existing production practices.

Factors deemed most important in decisions to plant trees and shrubs for harvest or to adopt Agroforestry systems were primarily socially and environmentally oriented. Factors preventing these activities were economically oriented. Agroforestry systems are often viewed as a legacy investment with environmental and economic returns in a long-term future context. In practice, Agroforestry systems provide both economic returns and environmental benefits in both the short- and medium-terms as well.

Agroforestry systems are perceived as a long-term legacy investment.

The average threshold level of additional income for stakeholders to implement a particular practice is approximately $12 to $15 per hour. However, profitability and social acceptance are ranked lower than sustainability and protection of the environment in stakeholder adoption of new practices. Thus the practice must be economically viable, but it need not provide a high degree of profit if impacts on other values are regarded as desirable and beneficial.

Sustainability and protection of environment key issues.

Although a large degree of the stakeholders use the internet to access information, preferred methods of learning about new crops and practices to implement, are based on demonstrable experience and personal consultation.

Demonstration is important for acceptance and implementation.

The most important support services identified by producers center around marketing. Improving market awareness, developing opportunities, and providing linking organizations, individuals or facilities between producers and buyers (and thus increasing ease of access to markets) are high priorities for producers.

Providing market support services is key.

The most important factors relating to buyers' decisions to purchase a product are product quality and consistency of supply. Buyers are interested in projects addressing regulatory and tenure issues to a greater extent than producers, as regulatory and tenure issues can have a large effect on consistency of supply.

Buyers want consistent high quality products.

5.3 Strengths, Weaknesses, Opportunities and Threats

Producers, regulators, educators and buyers in British Columbia have become stakeholders in the Agroforestry Industry as evidenced by: the variety and extent of the formal and informal reports on alternate crops and production systems; the interest expressed by attendance at Agroforestry seminars; the new Agroforestry courses being offered; and, the results of the Agroforestry questionnaire. As Agroforestry is an emerging sector, which integrates familiar products and modifications of familiar production systems with new products from the same systems, development and management present some unique challenges. Since Agroforestry is a means of diversifying production systems, products, product base, labour activities and cash flow it also provides distinct opportunities for individual stakeholders, communities and the larger agri-food industry.

Agroforestry is a means of diversifying production systems, products, resources, labour and cash flow.

A significant opportunity is inherent in one of the largest challenges faced by the agri-food and forest sectors in British Columbia. A majority of the population base lives

Agroforestry facilitates a connection between urban and rural societies.

distinct from the areas of primary agriculture and forest production with a decreasing percentage of that population depending directly on the resource sectors for their livelihood. This lack of connectivity between urban and rural societies imparts difficulties in terms of perceptions of farm and forest practices. This in turn impacts these sectors through governmental policies and regulations reflecting popular perception. The major factors to consider are:

- Primary agricultural areas are productive valley bottoms or productive lands on plateaus and prairies. These areas are also where population centers tend to grow resulting in conflicts within the urban/rural interface.
- Agricultural and forestry management activities are seen as being harmful to wildlife and fish habitat resulting in pressure for government to implement new and more stringent environmental regulations. These may be unnecessary and extremely detrimental to the viability of farm and forest operations.
- The manner in which food is being produced is becoming a much more prominent issue in regards to types of fertilizers used, whether or not pesticides are used, whether genetically improved crops are grown and how the products are produced.
- The cost of implementing programs aimed at addressing public environmental and production expectations cannot be passed back to the public as there is an even bigger demand for more, better food and non-food products at a reduced cost.

This opportunity exists because of what Agroforestry is and the types of products produced. Agroforestry products are often non-commodity products sold into niche markets, the sales of which are often direct to the consumer. The consumer is typically a portion of the public majority living in dissociation from the primary agricultural and forest-based production areas. This provides the opportunity to increase awareness and understanding of the contributions of managed agroforestry ecosystems to overall environmental health and wellness.

Agroforestry increases understanding of managed systems, environmental health and wellness.

Integration of Agroforestry systems with agricultural and forest-based management imparts diversity to production practices, which in turn affects the visual landscape and species richness and thus the perceptions of the public, largely for which biodiversity is often a utopian state. Agroforestry systems integrate varying crop species and lifeforms within a management unit increasing wildlife habitat and system structure over time. Thus the components of biodiversity increased by implementation of integrated Agroforestry systems are species richness, structural diversity, species evenness, landscape level

Agroforestry increases biodiversity in agro-ecosystems.

diversity and temporal diversity. Promotion of Agroforestry products from environmentally sound, sustainable systems is the ultimate form of 'value-added'.

The single most important issue identified by producers as a current roadblock was a lack of knowledge of markets and marketing.

> Lack of knowledge of markets and marketing is limiting Agroforestry.

The most important strengths were three-fold:

1) a high degree of awareness of, and interest in, producing alternate crops;
2) a high diversity of products capable of being produced within British Columbia; and,
3) the adoption of new crops and practices were primarily related to sustainability and environmental stewardship.

Since awareness of alternate crops is high, reduced effort is required in generating interest. A diversity of products means a diversity of markets, imparting long-term stability to the agroforestry sector. As Agroforestry systems are implemented in conjunction with current agricultural and forestry-based practices, a greater degree of stability at the individual farm level will result. The values identified for Agroforestry implementation are related to providing resources for future generations (sustainability) and improving environmental conditions. Thus values not only relate to economic stability but to adopting sound stewardship practices, which will result in sustainability of the production system and ultimately the agro-ecosystem.

> Sustainability and environmental stewardship are the main reasons for wanting to implement Agroforestry practices.

Individual strengths, weaknesses, opportunities and threats are found in the following tables. Many of these were specifically identified in the Agroforestry Questionnaire.

STRENGTHS

- Age range of the stakeholders is favorable in that the majority of the surveyed stakeholders had several years before retirement to adopt new practices.
- A high degree of expected operation continuity within the family indicates a long-term commitment by the producers.
- Moderate to high interest in implementing Agroforestry systems, with a high degree of awareness of existence of alternate crops. Therefore, extension and education begin at production and marketing rather than exposure to the concept.
- Diversity of products and potential products of which development and augmentation of will impart greater stability to individual operations and the agri-food sector as a whole.
- The ability to build upon existing momentum and resources (BC MAFF, Academic courses, NTFP projects etc.).
- We can build upon existing agroforestry programs, drawing upon the most favourable attributes of these programs, and learning from mistakes and omissions.
- Agroforestry systems are the modification and integration of familiar management techniques used to produce both familiar and new crops. This results in a degree of comfort for the producer in implementing an alternate crop and cropping strategy.
- Reasons for adopting new practices and crops are social and environmental.
- Even though producers may have a primary focus to their land management operations, such as field crop production, or a primary occupation such as a consulting business, there is an openness to try new crops and production techniques.

WEAKNESSES

- A low to moderate knowledge of Agroforestry production systems.
- Producers are not necessarily entrepreneurs.
- There is a general lack of knowledge of marketing by producers.
- Producers identified a lack of time and resources affecting the ability to search for, develop and maintain markets.
- Unknown or undeveloped markets for a diversity of products.
- A lack of short-term labour and lack of time available to producers for implementing new practices and adopting new crops.
- A lack of knowledge of specialized production techniques and crop quality.
- Issues *identified directly by the stakeholders* as needing attention or resolution include:
    - The need for adequate financial returns as Agroforestry systems are perceived as more labour intensive than traditional agriculture or forestry.
    - Regional disparities in services. A perceived focus of services in the Southern part of the province.
    - Public accessibility to land and this impact on management and growth of specialty crops.
    - Production timing.
    - No demonstration sites, technical assistance or training.
    - Existing regulations impede rather than facilitate production of crops outside of commodities.
    - Land tenure and management.
    - Product shipping costs.

OPPORTUNITIES

- Diversity of products and potential products results in greater industry stability.
- The lack of knowledge and time by producers to develop markets provides a niche for facilitating producer – buyer - consumer relationships.
- The development of links and (linking organizations) between producers and their markets.
- Increased public awareness of the BC agri-food industry and products provided.
- Integrating alternate crops and production practices with the production systems currently in use will assist time and labour allocation of producers, facilitating spread of the activities over a full season such that employees may be retained for a longer term.
- Through diversification of products, activities and timing of activities, Agroforestry systems may not only supplement income such that individual operations become more stable over time, they may make the continued management of individual operations more viable and attractive, contributing to community and sector stability.
- Increasing biodiversity through adoption of Agroforestry systems.
- Opportunities exist for adopting Agroforestry systems at several levels of scale including operation size, implementation intensity and time frame of adoption.
- Link agroforestry initiatives with farm and woodlot based practices that result in protection or enhancement of the environment.
- Increased demand for products derived from operations integrating Agroforestry systems into their production practices.
- Agroforestry as a farm system to promote or 'brand' products imparting additional value.
- Encourage stewardship planning through increased management flexibility.
- Opportunities *identified directly by the stakeholders* include:
  - Producers are willing to adopt Agroforestry systems if there is support for technical expertise and diversification of crops.
  - Producers are innovators. If there is a way to make an enterprise viable they will.
  - The production of a buyer/marketing guide with information specific to existing and potential crops.

THREATS

- Access to land for producers is required for production however trespass, vandalism, spread of noxious weeds and theft or poaching were identified as functions of public assumptions of access to private land. Limiting access provides a deterrent, however it impedes production and is expensive.
- Regulatory uncertainty in the implementation of Agroforestry practices e.g. uncertainty of recognition of Agroforestry products as farm status, ambiguity of landholder rights in harvest of new crops and addition of taxes on products previously untaxed or unregulated.
- Perception of Agroforestry solely as a 'green' technology without economic viability.
- Spread of diseases and pests, affecting product quality and supply.
- Decreasing levels of product as a result of disease, overharvest or natural fluctuations, which result in escalated competition for local related products and subsequent export out of province.
- Product competition between those derived from Agroforestry systems and 'wildcrafting' collection.
- Lack of recognition of Agroforestry systems.
- Limited understanding of market opportunities.
- Lack of implementation incentives.
- Real or perceived fluctuations in market demand.

6 Agroforestry Goals

From the Agroforestry vision and mission statements, and the current state of the BC Agroforestry industry four goals are identified. Achievement of these goals will facilitate a self reliant, innovative Agroforestry sector, furthering the objectives of the Agri-Food Futures Fund.

These goals are not individually isolated in the outcome of the actions undertaken to successfully achieve them. As with the implementation of Agroforestry systems, the initiation of the actions that fulfill each strategy and goal build upon each other synergistically. The outcome will be significantly greater than the sum of these four 'parts' intrinsic in this plan.

These four goals are:

Goal 1:	**The British Columbia Agroforestry Management Committee will develop a foundation of a minimum of 12 strategic partnerships[4] with agroforestry practitioners and associated organizations by March 31, 2008.**
Goal 2:	**The BC AMC will foster an increasing awareness of the benefits of Agroforestry systems through establishment of a code of practice and a resource network to provide technology transfer materials, training programs and workshops by March 31, 2008.**
Goal 3:	**The BC AMC will establish the means to link agroforestry practitioners and products with buyers and consumers by March 31, 2008.**
Goal 4:	**The BC AMC will advance development of a BC Agroforestry Product marketing strategy through establishing 'value-added' for products produced from Agroforestry systems; and, increased local, regional and international markets by March 31, 2008.**

These goals presented above are described by the issue addressed and context of outcome on the following page.

[4] Strategic partnerships are partnerships with people or agencies contributing money, land or expertise resources to development of Agroforestry initiatives.

Issue: Economic viability and environmental sustainability.

Context: The ability of the sector to address this issue depends on being able to demonstrate economic viability and increasing environmental stewardship through the implementation of Agroforestry systems.

Goal 1: The British Columbia Agroforestry Management Committee will develop a foundation of a minimum of 12 strategic partnerships with agroforestry practitioners and associated organizations by March 31, 2008.

Issue: Extension and access to information.

Context: Individual producers have a wide variety of needs as a function of the biological, human and capital resources available to them. Rather than promoting specific Agroforestry systems and crops, extension activities should enable stakeholders to develop plans which best meet their own interests, land base and resources.

Goal 2: The BC AMC will foster an increasing awareness of the benefits of Agroforestry systems through establishment of a code of practice and a resource network to provide technology transfer materials, training programs and workshops by March 31, 2008.

Issue: Development limited by a disconnection between practitioners, buyers and consumers.

Context: A lack of awareness of Agroforestry products and their value; and, product demand and access to buyers and consumers impairs market development.

Goal 3: The BC AMC will establish the means to link agroforestry practitioners and products with buyers and consumers by March 31, 2008.

Issue: Development and diversification of markets

Context: Establishing an Agroforestry-derived brand identity will move Agroforestry products away from commodity markets and toward higher price point products based on marketing of the production system.

Goal 4: The BC AMC will advance development of a BC Agroforestry Product marketing strategy through establishing 'value-added' for products produced from Agroforestry systems; and, increased local, regional and international markets by March 31, 2008.

7 Fiscal Strategy

The summaries of the proposed expenditures and the cost-sharing break down are presented in the following tables. Details of the fiscal management (auditor, expenses, and funding) are found in the Appendix.

7.1 Proposed Expenditures

Summary of total proposed expenditures for each of the Agroforestry Strategic Plan goals over five years is found below. This budget serves as a guideline for the application-driven process to be used in effecting the strategies outlined within each goal. It is based on a notional five-year allocation of $500,000 from the AFFF and 50:50 cost sharing between AFFF and the Agroforestry sector for a total five year fiscal year-end budget of $1,000,0000.

Goal	2003-04	2004-05	2005-06	2006-07	2007-08	Total
Strategic Partnerships	$125,000	$80,000	$50,000	$25,000	$10,000	$290,000
Technology Transfer	$60,000	$60,000	$50,000	$50,000	$25,000	$245,000
Linking Supply and Demand	$10,000	$70,000	$40,000	$40,000	$30,000	$190,000
Marketing Strategy	$5,000	$20,000	$80,000	$60,000	$110,000	$275,000
Total	$200,000	$230,000	$220,000	$175,000	$175,000	$1,000,000

7.2 Contributions

A summary of proposed AFFF and Industry contributions in each fiscal year over five years based on a notional five-year allocation of $500,000 from the AFFF and 50:50 cost sharing between AFFF and the Agroforestry sector (for a total five year fiscal year-end budget of $1,000,000) is found below. Administration costs to a maximum of 10% are included within these budget estimates.

The industry total is derived from the sum of in-kind and cash contributions.

Fiscal year	Total Budget	AFFF Contribution		Industry Total[1]		Industry Contribution (In-kind)		Industry Contribution (Cash)	
	$	$	%	$	%	$	%[2]	$	%[2]
2003-04	200,000	150,000	75	50,000	25	30,000	60	20,000	40
2004-05	230,000	120,000	52	110,000	48	20,000	18	90,000	82
2005-06	220,000	100,000	45	120,000	55	20,000	17	100,000	83
2006-07	175,000	80,000	46	95,000	54	15,000	16	80,000	84
2007-08	175,000	50,000	29	125,000	71	10,000	8	115,000	92
Total	1,000,000	500,000		500,000		95,000		405,000	81

[1] The industry total is derived from the sum of in-kind and cash contributions. The percent contribution is a portion of the grand total (AFFF + industry = 100%).

[2] The percentage breakout of the in-kind and cash industry contributions total 100% for the industry total.

7.3 Cost Sharing

As outlined in the *Agri-Food Futures Fund, Background Information* document, cost sharing of initiatives between governments and industry is a primary principle of the AFFF. The Agroforestry target level for cost sharing with the AFFF is 50:50 by the end of 2005-2006 (Year 3).

Because Agroforestry is an emerging industry composed of subsets of current production and experiential-based agri-food and forest industries, significant challenges are evident in developing self-funding mechanisms. Therefore the target levels of industry contribution increase over the course of implementation of the strategic plan, concomitant with increasing industry development. Thus the proposed weighting of funding accounts for a higher contribution from the AFFF in the initial phase of the strategic plan and a decreasing contribution in the latter phases.

At this time the AMC has identified an approach for developing strategic partnerships as well as several specific vehicles by which the 50:50 cost-sharing target can be met. A further description of the AMC approach can be found in the appendix, sections 7 and 8.

A few of the specific vehicles identified for attaining industry contributions include:

- Partnership Organization Meetings scheduled within the first few months of Strategic Plan implementation are designed to increase awareness of the fund to potential applicants and gain commitments of funds from potential industry partners.
- Partnership building with affiliated stakeholder agencies holds two purposes: 1) increasing awareness of Agroforestry systems and their place in 'best management practices; and, 2) exploration of contributions by the affiliated stakeholder agencies to implementation of the actions within the Strategic Plan. Contributions may range from expertise and other in-kind support to research dollars through NSERC, dollars for alternate land management through regional districts etc;
- Partnering of the annual Agroforestry conference/meeting with the annual meetings of affiliated industries such as the FBCWA, Cattlemen's Association, etc. The purpose is to increase collaboration and heighten awareness of the initiative.
- Fees for workshops and training sessions.
- Fees for producer, buyer and product guides.
- Fees for usage of Agroforestry marketing label.
- Opportunity costs of land usage in Agroforestry demonstration trials versus maintaining in current production.
- In-kind contributions of planting stock or other physical materials for establishment of demonstration trials.
- Scientific, technical and experiential expertise in implementing actions of the strategic plan.

Potential strategic partners include:

- Industry related – Federation of BC Woodlot Associations, BC Cattlemen's Association, BC Sheep Federation, Agroforestry practitioners, Agri-tourism operators etc;
- Environment related (management thereof) – Ducks Unlimited, Abbotsford Soil Conservation Association, regional municipalities, BC Hydro, Watershed Stewardship Councils etc;
- Educational and outreach – Royal Roads NTFP program, Malcolm Knapp Research Forest, UBC Agroforestry distance education program
- Government – Greencover Canada, Prairie Farm Rehabilitation Association, provincial ministries, Department of Fisheries and Oceans

8 Strategies and Performance Measures

The following section provides an overview of the steps the AMC will undertake to accomplish each of the four goals of the Agroforestry Strategic Plan. Detailed project information, progress to date and course adjustments as relating to the individual actions of the plan will be delineated in annual work and communication plans.

Goal 1: The British Columbia Agroforestry Management Committee will develop a foundation of a minimum of 12 strategic partnerships with agroforestry practitioners and associated organizations by March 31, 2008 **Note: within a strategy columns are independent**.				
Strategy	**Actions**	**Expected Outcomes**	**Performance Measures**	**Goal Links**
1. Promote and develop partnerships between agroforestry practitioners and industry leaders by geographical location and product sector across BC.	Assemble 4 Partnership Organization Meetings across the province. Participation by industry sectors as identified by AMC members, communications with stakeholders and communication list from the Agroforestry Questionnaire. Identify key 'gatekeeper' practitioners in each of BC's geographical regions. Establish criteria and evaluate suitability of possible participants. Solicit 'gatekeepers' for partnership. Establish framework/matrix for cost-benefit evaluation (fiscal, social, environmental) in conjunction with partners and affiliated stakeholders (see strategy 2). Formalize expectations, disclosures and working arrangements. Establish operational demonstration trials in conjunction with identified practitioners at variable levels of	Increased industry participation and ownership. Increased awareness of fund by potential applicants. Commitments of matching funds from potential partners. Technically and scientifically sound demonstration areas and criteria, on which to base assessments of fiscal, environmental and social effects of Agroforestry Systems. Establishment of core group of practitioners whom community and sector members respect. Increased awareness of Agroforestry systems. Increased awareness of 'on-the-ground' benefits (fiscal, social, environmental) to system	Synthesis of comments and input from each Partnership meeting (August 2003). Letters of support /commitment from potential partners (August 2003). Identification of key gatekeepers within each geographic region, interested in establishing Agroforestry demonstration areas in conjunction with their current management practices (March 2004). Establishment and reporting of the demonstration farm / forests in each region (March 2005). Consensus derived assessment criteria for system assessment (March, 2005). Practitioner friendly budgeting report/guide using the demonstration trials as examples - similar to *Economic Budgeting for Agroforestry Practices* from	Ensuring technically sound demonstration trials and evaluation criteria are requisite to maintaining long-term collaboration with strategic partners and affiliated stakeholders. Achieving the first goal links to advancement of subsequent actions of the plan. (Goal 2, 3, 4) Establishment of demonstration programs links with establishing a resource network and the basis for technology transfer materials (Goal 2).

Goal 1: The British Columbia Agroforestry Management Committee will develop a foundation of a minimum of 12 strategic partnerships with agroforestry practitioners and associated organizations by March 31, 2008 **Note: within a strategy columns are independent**.				
Strategy	**Actions**	**Expected Outcomes**	**Performance Measures**	**Goal Links**
(*continued*…)	operation scale. Trials to span types of Agroforestry systems and scale of operation. Complete an analysis of each demonstration and associated operation. Forecast future benefits. Conduct benefit sensitivity analysis to market fluctuations. Use demonstration trials for stakeholder tours and workshops. Identify uncertainties and outcomes following system implementation – "lessons learned". Develop information notes from demonstration farms/forests.	implementation. Increased practitioner and stakeholder awareness of alternate crops and management. A network of demonstration farms / forests spanning scales of implementation and techniques for use in critical evaluation of outcomes, and for tours and workshops. Actual and projected advantages through system implementation. Creation of "on-the-farm" agroforestry experts for case study presentations. Information for education and extension. Contribution to 50:50 matching funds through affiliated agency incentives (see strategy 2) e.g. NSERC research dollars.	the University of Missouri (Initial guidance report March 2006; follow-up report March 2008). BC on-the farm/forest specific assessment of benefits/merits of Agroforestry implementation that includes fiscal, social and environmental attributes. (March, 2008). Farm/forest information notes (March, 2006).	Publication of a budgeting guide links with providing technology transfer materials (Goal 2). Demonstration of environmental benefits of Agroforestry systems links with creating a 'value added' identity for Agroforestry products (Goal 4). Publication of information notes links with the provision of technology transfer materials in (Goal 2).

Goal 1: The British Columbia Agroforestry Management Committee will develop a foundation of a minimum of 12 strategic partnerships with agroforestry practitioners and associated organizations by March 31, 2008

Note: within a strategy columns are independent.

Strategy	Actions	Expected Outcomes	Performance Measures	Goal Links
2. Promote and develop partnerships between affiliated stakeholder agencies. (*continued…*)	Identify strategic agencies. Agencies include: • environmental NGOs, preservation / restoration / protection associations (e.g. Ducks Unlimited) • regulatory agencies (e.g. BC MAFF, MoWLAP, DFO) • Agri-tourism practitioners, Production and marketing associations (e.g. direct farm marketing, BCAC) • Universities and educational outreach (e.g. UNBC, UBC, Ag Aware BC), • probable funding agencies (e.g. BC Hydro, NSERC, FIA, Green Cover Canada, carbon credits) Research and synthesis of agencies questions, concerns, and interest. Explore participation and validation of benefits of Agroforestry practices.	Linkages between practitioners and affiliated stakeholders / regulatory agencies. Information and experience exchange. Stakeholder agency acknowledgment of Agroforestry system benefits. Acceptance and support of environmental NGOs for Agroforestry systems. Agroforestry system acceptance (market and product image). Increased buyer / consumer awareness through Agri-tourism and producer / marketing associations. Participation of educational institutions in assessing fiscal, social, environmental changes.	Documented questions / concerns and interests by affiliated stakeholder agencies (March, 2004). Participation in development of assessment criteria (March, 2004). Identification of 5 strategic partners (March 2005). Scientific, peer-reviewed publications and technology transfer documents produced (March, 2008). Funding contributions (March, 2005 - 2008).	Partnership development links with development of a resource network (Goal 2). Acceptance and support by environmental NGOs links to creation of a 'value added' Agroforestry identity (Goal 4).

Goal 1: The British Columbia Agroforestry Management Committee will develop a foundation of a minimum of 12 strategic partnerships with agroforestry practitioners and associated organizations by March 31, 2008 **Note: within a strategy columns are independent**.				
Strategy	**Actions**	**Expected Outcomes**	**Performance Measures**	**Goal Links**
	Explore incentives provided through stakeholder agency support / endorsement. Establish mutually beneficial partnerships based on stakeholder agency incentives and benefits of Agroforestry systems to the stakeholder agencies.	Access to support funding (NSERC, Federal Environment monies). Regulatory acknowledgement and support of Agroforestry systems. Increased industry acceptance of the need for environmental regulations.		

Goal 2: BC AMC will foster an increasing awareness of the benefits of Agroforestry systems through establishment of a code of practice and a resource network to provide technology transfer materials, training programs and workshops by March 31, 2008.

Note: columns are independent

Strategy	Actions	Expected Outcomes	Performance Measures	Goal Links
1. Increase awareness and implementation of Agroforestry Practices through development of a code of practice and provision of technology transfer materials, training sessions and workshops.	Develop a framework to explicitly delineate Agroforestry from other or similar farm / forest practices (e.g. wildcrafting). Review codes of practice for other natural products (e.g. organic produce). Create a draft code of practice. Develop and implement a consultation process to request, review and receive input on code of practice. Develop final code of practice. Solicit acceptance and endorsement of code of practice. Survey existing technology transfer, education and extension material. Build upon existing infrastructure and coursework. From completed questionnaire identify and prioritize training needs as described by producers and buyers. Consult with affiliated stakeholder agencies (*see Goal*	Production standards targeted at manner in which product is produced and product quality. Ability to delineate products as derived from BC Agroforestry systems. Practitioner and associated stakeholder agency consensus on code of practice. Enhanced reputation for BC Agroforestry products. Skilled and knowledgeable Agroforestry practitioners. Increased awareness of products and markets for these products. A centralized pool of resources. Enhanced product quality. Reduced uncertainty regarding system	Evaluatory matrix of current codes of practice for other agri-food and forest-based industries. (March 2004) Documentation of comments and input received on Agroforestry code of practice (March 2005). Publication of Agroforestry Code of Practice (March 2005). Number of workshops/training sessions held (March 2004, 2005, 2006, 2007). Log of the range of practice and regional representation by workshop participants (March 2004, 2005, 2006, 2007). Synthesis of feedback comments from workshop participants (March 2004, 2005, 2006, 2007). Log of requests for Agroforestry information and workshops (March 2004, 2005, 2006, 2007).	Definition and code of practice links with the creation of an identity and marketing opportunities (Goal 4). Explicit identification of what is and is not Agroforestry leads to the foundation on which to build a market strategy. (Goal 4). Technology transfer and educational workshop materials link with Agroforestry Network formation (Goal 3). Technology

Goal 2: BC AMC will foster an increasing awareness of the benefits of Agroforestry systems through establishment of a code of practice and a resource network to provide technology transfer materials, training programs and workshops by March 31, 2008. **Note: columns are independent**				
Strategy	**Actions**	**Expected Outcomes**	**Performance Measures**	**Goal Links**
	1) for input on needs/unknowns and educational requirements. Prepare a workplan and program for technology transfer, training programs, workshops and stakeholder agency participation. Develop Agroforestry awareness information for agri-tourism and practitioners. Identify individuals, organizations and stakeholder agencies in the formation of a resource network (e.g. Royal Roads University NTFP program). Liaison with existing resources and resource providers. Build upon and compliment existing framework.	implementation. A further understanding of knowledge gaps and perceptions. Information exchange. Increased awareness of business practices, incentives, opportunities. Increased awareness and use of product marketing techniques. Enhancement of stakeholder skill set for identification and development of options, which best meet the needs of their individual interests, resources and landbase. Contributions to 50:50 matching funds through workshop and training fees.	Increase in number of farms producing 'specialty crops' in 2006 Census of Agriculture. Identified network of organizations, individuals and agencies participating in Agroforestry related projects (March 2004, 2005, 2006, 2007). Establishment of a list serve and mailing list for Agroforestry announcements (March 2004 - 2008).	transfer and extension link with gatekeeper participation (Goal 1). Increasing consumer awareness of Agroforestry through information sheets and marketing endeavours contribute to development of an Agroforestry marketing strategy (Goal 4).

Goal 3: The BC AMC will establish the means to link Agroforestry practitioners and products with buyers and consumers by March 31, 2008. **Note: columns are independent**				
Strategy	**Actions**	**Expected Outcomes**	**Performance Measures**	**Goal Links**
1. Develop the means to facilitate exchange of products and information fostering increased awareness and market access. Promote and develop partnerships between affiliated stakeholder agencies.	Develop a list of local producers and local (by region), national and international buyers. Develop a provincial Agroforestry Product guide and directory. Make lists and guide available in print and digital format for a fee. Facilitate the establishment of an Agroforestry Network. Explore fee structure related to value of products. Development of a website designed to link products with buyers.	Increased access to markets. Increased awareness of markets and business opportunities. Increased market development and expansion through increased knowledge of products available and sought. Improved exchange of information. Contribution to 50:50 matching funds through sale of directories and website advertisements. Long-term self-sustainability of the linking mechanisms.	List of producers and buyers (March 2004-2008). Agroforestry Product guide and directory (September 2004). Number of guides and lists ordered and downloaded from web (March 2006, 2007, 2008). Initiation of a formal Agroforestry Network (March 2006). Website initiation (March 2005). Website usage and feedback (March 2006, 2007, 2008).	The producer, product and buyer guides are a resource for increasing awareness of Agroforestry and Agroforestry-derived products. (Goal 2) Establishment of an Agroforestry Network links with delineation of an Agroforestry identity for marketing purposes (Goal 4). Development of a website links with technology transfer objectives (Goal 2).

Goal 4: The BC AMC will advance development of a BC Agroforestry Product marketing strategy through establishing 'value-added' for products produced from Agroforestry systems; and, increased local, regional and international markets by March 31, 2008.

Note: columns are independent

Strategy	Actions	Expected Outcomes	Performance Measures	Goal Links
1. Develop, promote and support an "identity" for Agroforestry systems and the products produced from these systems to create new and strengthen existing markets. Use this "identity" to brand products and production processes.	Research other successful Agroforestry marketing strategies elsewhere in Canada and the United States. Research other successful BC marketing organizations. Develop an Agroforestry marketing/communications plan. Develop/create an Agroforestry "identity" for both process and products. Develop an Agroforestry logo, log line/slogan. Develop marketing materials to support and promote BC Agroforestry identity and image (e.g. participation in BC Grown). Refine content and direction of Agroforestry Network website.	Establish "value-added" as an advantage of Agroforestry Network membership. Increased awareness of Agroforestry products. Increased local, regional and international markets. Increased "value" in products derived from farms / forests employing Agroforestry systems. Increased value reflected in consumer preference to purchase Agroforestry-system derived products. Increased niche market opportunities with a higher price point product. Increased implementation of Agroforestry systems.	Increasing membership in Agroforestry Network (March 2007, 2008). Measurement of cash contributions to Agroforestry projects conducted in conjunction with AFFF (March 2007, 2008). Derivation and release of an Agroforestry marketing plan (March 2007). Derivation of an 'Agroforestry BC Product' marketing label (March 2008). Information brochures for public consumption on Agroforestry systems, products and benefits (March 2008).	Marketing materials link with educational objectives of Goal 2. Increasing awareness of Agroforestry through marketing links with fostering associations between supply and demand (Goal 3).

9 Implementation and Performance Framework

9.1 Implementation

Implementation of this strategic plan for the development of the Agroforestry industry will increase the sustainability of the agri-food sector in British Columbia. The actions implemented will influence production and marketing decisions by stakeholders in so far as they increase and diversify the opportunities available to practitioners as a whole. However, development of opportunities is on a sector-wide basis rather than an individual basis, thereby avoiding conflict of interest issues that provide benefit for only one or a few individuals.

As the AFFF is a source of matching funds targeting risk management, the implementation of the strategic plan focuses on risk management strategies. On the broadest level, industry development itself is a long-term risk management strategy increasing the stability of the larger agri-food sector through diversification and expansion. Implementation of this plan fosters risk management strategies for Agroforestry by facilitating development of strategic partnerships, increasing stakeholder knowledge and skills, linking supply and demand and developing a long-term marketing strategy. At the landscape and practitioner level, integration of Agroforestry systems with current management practices augments risk management by diversifying income and labour; contributing to operation viability; mitigating environmental concerns; and, expanding social benefits.

At this stage of the strategic planning process goals have been established along with the strategies to achieve them. Performance targets and schedules for completion have been delineated to ensure accomplishing the actions required to meet the recommended strategies and achieve the goals.

Each project initiated under the Agroforestry strategic plan will be required to submit information demonstrating where and how funding was (or will be) spent in a transparent, efficient and timely manner. In turn the AMC will demonstrate the same to the IAF through annual reports.

Access to the funds will be through both an application-driven process and by the Management Committee initiating requests for proposals to address key priorities that have been identified by this plan. In order to facilitate the process each project and project proposal will include a brief description of the project, key objectives, benefits sought, project deliverables, cash and in-kind contribution, linkages to other projects or initiatives and specific benchmarks with which to assess project progression and ultimate evaluation upon completion. A project application form may be found in the Appendix[5].

[5] Information requested based on *Investment Agriculture Foundation of BC, Guide to Applicants* and abbreviated form developed by the Agri-tourism Alliance.

The AMC will be responsible for assessing and approving applications, monitoring and evaluating projects. Periodic evaluation will coincide with authoring of the annual reports and requests for advance funding from the fund trustees.

At the end of each fiscal year and coinciding with report submission an Agroforestry conference will be held at a different location within the province. The purpose of the conference will be twofold: 1) to showcase the work to date, thereby increasing awareness of Agroforestry on-the-ground; and, 2) to provide an integrated approach of conveying technology transfer information for a diverse range of subjects including production, marketing and environmental effects. Representatives from the AFFF project participants, the agri-food and forest-based industries in BC and the North American Agroforestry community will be solicited for participation, resulting in both technical and non-technical information exchange and an increasing awareness of BC's contributions to environmental sustainability and on-farm and woodlot viability.

The Agroforestry industry is working toward a five-year target of Agroforestry in BC being a self-sustaining, industry driven initiative embarking on the second strategic planning cycle and incorporating the lessons learned from the implementation of this strategic plan, the first phase of industry development.

9.2 Performance Framework

The performance framework is based on the performance measures defined in each goal of Section 7 and the specifics of each project approved under the implementation plan. Through the application process, each proposal will be required to submit project deliverables, outcomes and performance measures, in relation to the strategy which the project is supporting and the action item it is addressing. Criteria, against which progress in implementing the strategies of the Agroforestry plan can be assessed, will be based on the performance measures, but further refined in consultation with industry partners and affiliated agencies. This relationship will provide a foundation for continuing the dynamic strategic planning process in an iterative manner of continuous evaluation, improvement, adjustment and reevaluation. The definitive measure of success will be identification of Agroforestry in British Columbia with economically sustainable and environmentally beneficial systems and products.

9.3 Communication Strategy

Agroforestry is an emerging industry defined by its production practices and composed of subsets of BC's current agri-food and forest industries. As a result, a number of goals of the strategic plan are dependent upon increasing awareness of the development potential and gains possible from integrating Agroforestry Systems with current land management practices. Fostering awareness at each level from the producer/practitioner to the regulator, environmental NGO and consuming public are a substantive part of the focus of many of the actions within the strategic plan and are essential to achieving the strategies and goals.

Vehicles identified within the action plan, which serve to communicate awareness include:

- information notes developed from the demonstration trials (Goal 1);
- partnership exploration with affiliated stakeholder agencies (Goal 1);
- technology transfer programs (Goal 2);
- an information oriented 'front end' for the website linking producers and buyers (Goal 3);
- development of a marketing strategy and materials to support a labeled Agroforestry product image (Goal 4).

The AMC will develop communication guidelines and practices for standardizing how, by whom, when and why information is communicated to stakeholders, strategic partners, affiliated agencies and the urban and rural publics. It is anticipated that ongoing consultation with industry and affiliated agency representatives will lead to modifications of the guidelines and practices, to meet changing communication needs.

Communication list compiled through the Agroforestry Questionnaire.

The communication list compiled through the Agroforestry Questionnaire will form the base of the stakeholder contact list. This list will be used in conjunction with expressions of interest from stakeholders and affiliated agencies to assemble Partnership Organization meetings across the province within the first months of funding approval. The purpose of the meetings is to increase industry participation and ownership of Agroforestry initiatives, in conjunction with increasing awareness of the fund and Agroforestry system attributes. The annual Agroforestry conference held at varying locations within the province will serve as a means of showcasing the work to date and advancing awareness of Agroforestry Systems as an optional 'best management practice' to participants.

Partnership Organization Meetings.

Annual Agroforestry conference/meeting.

Press releases

Information notes

Newsletter

List serve

Displays at fairs/conferences

Other potential communication vehicles include press releases, information notes placed in agri-food and forest industry newsletters, an Agroforestry newsletter or list serve, and display materials for fairs and conferences. Standard formats will be established for major publication types including press releases, technology transfer notes and materials, newsletters and reports.

10 Literature Cited and Bibliography

For a more comprehensive list of reports and papers pertaining to Agroforestry and related products in British Columbia, please see Section 6 of the Appendix.

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