



Misty Isles Economic Development Society

Haida Gwaii Agriculture Strategy

and

Implementation Plan

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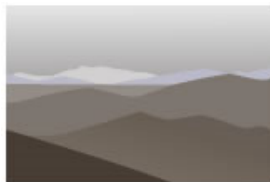
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Agriculture and Agri-food Canada (AAFC), the BC Ministry of Agriculture and Lands (BCMAL), the Investment Agriculture Foundation of BC (IAF) are pleased to participate in the development of this project. We are committed to working with our industry partners to address issues of importance to the agriculture and agri-food industry in British Columbia. Opinions expressed in this report are those of the participants in the Haida Gwaii Agriculture Strategy and Implementation Plan process and not necessarily those of IAF, BCMAL or AAFC.



THE COAST SUSTAINABILITY TRUST



Introduction

The Misty Isles Economic Development Society (MIEDS), the Graham Island East Coast Farmers Institute, Islands Food and other interested stakeholders met in November 2009 to discuss the potential for agricultural growth as well as the challenges and opportunities facing farmers and producers. The participants identified the need for an agriculture strategy to provide direction to and development of agriculture on Haida Gwaii.

The primary objective of the Agriculture Strategy is to stimulate and develop local agricultural opportunities on Haida Gwaii. This Strategy and Implementation Plan may have particular interest for small scale or new food producers on Haida Gwaii wishing to expand their current operations.

Current and historical agriculture practices on Haida Gwaii have been documented as has research into successful agriculture practices in areas with similar climate, latitude and economic base. This research was conducted as a means to provide greater awareness of existing opportunities for local agriculture.

With the support of the local governing bodies, MIEDS intends for the strategy to be implemented in congruency with the Haida Gwaii Strategic Land Use Agreement where required by relevant legal orders that have come out of the Agreement.

The Process

Throughout the fall of 2010, a team of local researchers obtained information on historical agricultural operations on Haida Gwaii and conducted a review of current agricultural practices. In addition, research was provided on other farming communities in areas having similar latitude, climate and economic base. Potential opportunities were identified and presented with the research findings.

A Technical Advisory Committee, comprised of agricultural knowledge holders, was formed to review the findings, guide the research and provide feedback to ensure accuracy as much as possible.

Recommendations and feedback were provided by stakeholder groups throughout the document review process.

- A series of public meetings in each island community (7) were held (December 2010 to January 2011) to present the findings, obtain feedback and identify topics and goals being of primary concern. Following are a list of concerns consistently expressed by the public:
 - The effect of rising fuel prices on freight/supplies/food
 - Their dependency upon transportation systems
 - The effect of climate change on food production
 - Access to affordable land for food production
 - The need for education with regards to food production
 - Technical and infrastructural support for farmers
 - Marketing assistance

A public action-planning workshop ('The Future of Food on Haida Gwaii – Taking Action') was hosted Feb 19, 2011. Participants at the working meeting formed groups and reached consensus in prioritizing the above mentioned goals. Following this process, participants developed action plans for those goals having the highest rating of importance and urgency.

These goals and action plans form the basis of the Haida Gwaii Agriculture Strategy and Implementation Plan.

Guiding Principles

The following were identified by the public throughout the 7 public meetings as guiding principles to stimulate agriculture/food production on Haida Gwaii:

- Significantly increase the production and consumption of locally grown food and reduce the dependency on outside transportation systems
- Promote education (various components of food production – for consumers and producers)
- Promote business opportunities for food producers
- Develop partnerships to support local food production endeavours
- Develop and improve infrastructure, including access to land, to increase production of local food
- Develop policies and work with policy makers to ensure a secure source of local food

Vision

A vision of agriculture on Haida Gwaii was defined at the action-planning workshop. Workshop participants expressed a vision of agriculture on Haida Gwaii as becoming sustainable and providing for a self-sufficient lifestyle for islanders. The future was seen as 'local'.

In addition, participants saw the future in terms of healthy people and working partnerships between people and the Islands Community as a whole.

Food on Haida Gwaii and Beyond

Haida Gwaii, with a population of approximately 5,000, is a remote archipelago 90 nautical km off the north coast of BC. The total area of the archipelago is approximately 9,945 square km and covers 250 km from north to south. Access to the islands is limited to ship or aircraft.

- Food, material goods and mail are transported via BC Ferries or barge.

The vast majority of food consumed on Haida Gwaii is imported (approximately 90%) from various national and international regions to Vancouver distribution centers then again transported over 1500 km by truck to Prince Rupert followed by another 7 hours (or more) of ferry or barge transportation depending upon weather conditions affecting sailing times.

- Residents are dependent upon costly transportation systems to provide food and supplies.

A recent announcement (Feb 3, 2011) by BC Ferries President David Hahn reported that fare increases for the northern BC Ferry routes (Prince Rupert to Haida Gwaii) are expected to increase by 100% over the next 4 years (26% annually)¹.

On February 3, 2011, the UN Food and Agriculture Organization (FAO) reported that the Food Price Index had broken all previous records since the FAO began measuring food prices in 1990. The FAO noted that “world food prices surged to a new historic peak in January for the seventh consecutive month”.

Local grocery stores report increases of approximately 20% in basic groceries since 2009 and anticipate steady increases in the cost of food for Haida Gwaii over the next year (2011).

¹ <http://www.cbc.ca/canada/british-columbia/story/2011/02/04/bc-ferry-fares.html>

Haida Gwaii Observer, February 10, 2011 'Huge fare increase projected by Ferries' boss', p.1

A Brief Analysis of the Agriculture Industry on Haida Gwaii

The following is a brief summary of the current agriculture industry on Haida Gwaii

Strengths

- Increasing interest in and support of buying local
- Increasing interest in establishing a network of farmers markets in the various islands communities
- Increasing volume of local food being produced annually
- Revenue from local food production increasing annually
- Many local food producers expressing a consciousness of and commitment to growing food in a healthy and sustainable manner
- Public concern over the increasing cost of transporting imported food to Haida Gwaii
- Public concern for our dependency upon transportation systems
- A public interest in becoming self-reliant and food-secure
- Established food processing facilities
- Established storage facilities
- Public enthusiasm and commitment to ‘taking action’ toward stimulating a working agricultural industry on Haida Gwaii (see Action Plans)
- High unemployment (an available labour force)
- Mild climate (an extended growing season)
- Changes to meat regulations, new licensing and recent food safety seminars (Ministry of Health) allowing for farm gate and retail sales
- Government support for growth of the agriculture industry

Challenges

- Geographically isolated
- High cost of transporting agricultural supplies to Haida Gwaii
- A current dependency upon transportation systems to provide hay, feed and other agricultural supplies
- The need to produce our own feed locally or livestock operations will not be viable in the long term
- Difficult for local food producers to compete with the cost of inexpensive imported food
- High unemployment (limited finances)
- Mild climate (challenges with ripening)
- No formal/established bulk buying groups
- Regulations resulting in costly quotas for dairy and egg operations which, prohibit production on a local basis
- Lack of funding to establish experimental farms/plots for research purposes and to develop varieties of seed that do well in Haida Gwaii
- Currently there are no crown land leases or purchases as a result of an understanding between the Provincial Government and the Council of the Haida Nation
- Unaffordable land for food production

Opportunities

- Prioritizing and putting into practice, where possible, research from other models of agriculture, agricultural prospects, climate, plant hardiness zones, diseases, production costs and efficiency
- Seek local government or other funding support for the development of farms or plots for the purpose of research, training and mentoring, increasing food diversity, providing employment and benefiting the communities by demonstrating a culture of “healthy living”
- With support from the governing bodies, larger scale food production in close proximity to communities is possible through zoning for agricultural land (having agricultural capability), animals in appropriate enclosures, community gardens and community farms

- Develop unique value-added local products using local food processing facilities
- Work with governing bodies toward amendments to federal and provincial regulations to assist in the revitalization of agriculture on Haida Gwaii (ie: in the same manner that resulted in changes to the meat regulations)
- Production opportunities for greenhouse and unheated plastic covered tunnels (extended season for growers in coastal climates)
<http://www.fourseasonfarm.com/books/index.html>
- Production opportunities for Community Supported Agriculture (CSAs)
- Berry production (Blueberries, Raspberries, Strawberries, Cranberries)
- Developing an agro-forestry model for Haida Gwaii
- Establishing partnerships for freight sharing and bulk buying endeavours
- Work with local, provincial and federal governments to amend and develop regulations and tax incentives to enhance agricultural/mariculture prospects for Haida Gwaii
- Cultivation of clams, oysters, scallops, mussels, geoduck and sea cucumbers
- Research seaweed production and markets for seaweed products
- Business opportunities for waste products as soil amendments/compost/potting soil
- Business opportunities for local soil amendment production

Agriculture Strategy and Implementation Plan

Agricultural Priorities for Haida Gwaii

Participants at the 7 islands-wide community meetings identified six priority areas which, if focused upon would help to stimulate the development of an agriculture industry on Haida Gwaii.

These areas are Education, Production Support, Marketing, Business Opportunities, Policy and Resources/Partnerships.

The priority areas and related goals were brought to an islands-wide public ‘action planning’ workshop ‘The Future of Food on Haida Gwaii’ which was attended by approximately 70 participants. Participants provided feedback on the importance of these goals and chose those deemed most important for the development of action plans.

Priority goals identified by the public at the workshop are listed in detail in Appendix D of the Haida Gwaii Agriculture Strategy Background Document. Small groups were initially formed at the workshop and these groups began the process of developing action plans.

The Action Plans form the basis of the Haida Gwaii Agriculture Strategy Implementation Plan.

Action Plans for Priority Goals

The following Action Plans were developed by sub-committees formed at The Future of Food on Haida Gwaii workshop, as part of the Haida Gwaii Agriculture Strategy and Implementation Planning process. These action plans have priority status for implementation.

Education

Education Committee and Graham Island East Coast Farmer's Institute

Goal: To Provide Learning Opportunities for Food Production on Haida Gwaii

Activity	Timeline	Resources needed
1. Provide an Educational Series of Workshops for Agriculture and General Food Production in 2011 and 2012		
1.1 Survey the Educational Needs of Food Producers on Haida Gwaii	April 30, 2011	Emails & Phone Calls to Farmers Institute, Islands Food members, Food Producers and the General Public
1.2 Identify Workshops Required, Facilitators Available and Costs	May 31, 2011	
1.3 Identify Funding Sources to Cover the Costs of the Series	May 31, 2011	
1.4 Advertise	September 1, 2011	Emails to Farmers Institute & Islands Food members, Observer and Haida Gwaii Trader Ads
2. Offer Introduction to Organic Gardening on Haida Gwaii (North and South Island) in 2011		
2.1 Publicize the workshops	March 1, 2011	Emails to Farmers Institute & Islands Food members, Observer and Haida Gwaii Trader Ads
2.2 Secure classroom and garden space for workshops	March 1, 2011	phone/emails
2.3 Confirm Registration	March 31, 2011	phone/emails

Production Support

Production Support Committee, Graham Island East Coast Farmers Institute

Goal: To increase agricultural food production on Haida Gwaii

*Please also see Appendix E in the Background Document – Site Assessments for agricultural land in proximity to the communities

Activity	Timeline	Resources Needed	Responsible
<p>#1) Local Agricultural Extension (Support) Agent: Paid resource person for farmers and gardeners re:</p> <ul style="list-style-type: none"> -taking soil samples and interpreting results -recommending amendments for maximum yield -identifying pests and diseases -recommend solutions for pests and disease problems -recommend appropriate crops and varieties -assist with regulatory standards -organize education sessions -coordinate an all-islands production plan -mentoring of new food producers and young people 	<p>-Training May 2011 – April 2012</p> <p>-Position will be on-going from March 2012.</p>	<p>-Funding to educate an individual to be capable of providing technical assistance to farmers and gardeners on Haida Gwaii.</p> <p>-Funding for a one-year pilot project employing the trained individual to provide technical assistance to food producers on-island.</p>	<p>Training to be funded through the Coast Sustainability Trust, Gwaii Trust Society and / or Investment Agriculture Foundation.</p> <p>The position could be funded by fee for services after a one-year position paid by Gwaii Trust as a Pilot Project to Support Local Agriculture.</p>

Activity	Timeline	Resources Needed	Responsible
<p>#2) Research Farm(s):</p> <p>Identification of appropriate land in areas that could be cleared and cultivated in order to test the growing potential of Class II land.</p> <p>Crops that may do well in a hotter interior climate with good soil are tree fruits, grapes, tomatoes, grains and forage.</p>	<p>- Monitor climate data to assist with identification of appropriate areas</p> <p>-Application for agricultural crown land by Regional District Rural Graham Island Area 'D' in 2012.</p> <p>-Development of Crown Land in spring of 2013</p>	<p>-Application for Crown Land by Area D Rural Graham Island Regional District (20 acres).</p> <p>-Potential funding for development of the experimental farm/plots: Universities, GTS, IAF, Ministry of Agriculture, and individuals interested in clearing and leasing land for future opportunity to buy.</p>	<p>Production Support committee, Farmer's Institute and post secondary institutions</p>
<p>#3) Research Plots: the development of small plots and on-farm plots for experimentation.</p> <p>Experimentation includes, grain trials, fruit and vegetable variety trials, local amendment testing (ie: limestone, seaweed), seed saving, weed control, crop rotation, cover cropping, soil building techniques, composting etc.</p> <p>The support will take the form of test seeds supplied, University student support for gathering data and reporting, student help with soil preparation and planting, technical support to learn: seed saving, composting techniques etc.</p>	<p>-May 2011 – Nov.2013</p> <p>(some trials and seed saving will need at least 2 years)</p>	<p>-Ministry of Agriculture for technical support</p> <p>-IAF for funding</p> <p>-GTS funding</p>	<p>-Individual Farmers will be responsible for on-farm plots with technical support through University students and or Min. of Agriculture</p> <p>-Funding bodies will be responsible for the cost of seed, amendments, courses etc.</p>

Activity	Timeline	Resources Needed	Responsible
<p>#4) Community Farms:</p> <p>Islands community will be asked to identify approximately 200 acres of appropriate agricultural land (having agriculture capability) adjacent to their community to be placed in the Agricultural Land Reserve and protected for food production.</p>	<p>-This priority should be in the OCP and pursued ASAP.</p>	<p>-Support from the Municipal Councils, Band Councils and Regional Districts</p>	<p>Municipal Councils, Band Councils and Regional Districts</p>
<p>#5) Protection of the ALR:</p> <p>Guiding Principles for the ALR</p> <p>A productive, secure and economically viable agricultural land base in British Columbia requires that:</p> <ol style="list-style-type: none"> 1. There is no net loss of Agricultural Land Reserve land to urban encroachment or other non-farm uses; 2. Agriculture is recognized as the priority use in the ALR; 3. Urban growth occurs through densification, in-fill and re-development of existing urban lands rather than through expansion onto agricultural lands; 	<p>-As part of each community OCP</p>	<p>-Adoption of Principles by all local governments.</p>	<p>-Local Governments</p>

<p>4. Regional Growth Strategies are developed that direct growth into existing urban areas and away from the Agricultural Land Reserve;</p> <p>5. The Agricultural Land Reserve designation reduces in perpetuity the economic pressure of urban land speculation on agriculture and thus provides farmers with the certainty that is needed for continued investment and prosperity;</p> <p>6. The Agricultural Land Reserve boundary receives special planning treatment to reduce urban/rural conflict while maximizing the potential of the agricultural lands adjacent to the interface;</p> <p>7. Communities formally recognize agricultural working lands as an economic engine rather than a land bank to provide for further urban expansion; and</p> <p>8. Local citizens and community groups recognize the fundamental importance of agriculture in their community and actively advocate for its long-term protection.</p>			
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Activity	Timeline	Resources Needed	Responsible
#6) Access to Land			
1. Work with local governing bodies to obtain support for access to large areas of agricultural land in proximity to all communities	May – Sept 2011	Support from the CHN, Municipal Councils, Band Councils and Regional Districts	Production Support committee, MIEDS, Farmers Institute, Extension Agent
2. Work with local governing bodies to obtain support for reduced cost of agricultural land and long term leases of land within the municipal boundaries	May-Sept 2011	Support from the CHN, Municipal Councils, Band Councils and Regional Districts	Production Support committee, MIEDS, Farmers Institute, Extension Agent
3. Enter into discussion with the CHN with respect to support of applications for crown land for agriculture purposes	Sept –Dec 2011	Support from the CHN, Municipal Councils, Band Councils and Regional Districts	Production Support committee, MIEDS, Farmers Institute, Extension Agent

Business Opportunities

Business Opportunities Committee

Goal: To Encourage Agricultural Business Opportunities on Haida Gwaii

Activity	Timeline	Resources
1. Develop Local Soil Amendment Products		
1.1 Conduct Research on Fertilizers Used Locally	April 2011	Farmers Institute 2010 Report on Fertilizer
1.2 Contact Food Producers, Islands Food, Farmers Institute re Use of Soil Amendments	April 15, 2011	Vehicle, Survey
1.3 Identify Products for Soil Amendments	May 15, 2011	Reference Books, Haida Gwaii Trader, Haida Gwaii Agriculture Strategy Documents
1.4 Conduct Research on Possible Recipes for Local Soil Amendments and the Resources Needed	June 15, 2011	Internet Reference Books

Activity	Timeline	Resources
2. Develop a Formal Bulk Buying Club and Shared Transportation System for Freight		
2.1 Conduct Research on Existing Local Food Buying Groups	May 1, 2011	Farmers Institute, Islands Food, Ads in the Observer and HG Trader
2.2 Conduct Research Into Local Interest for Agricultural Products and Other Bulk Buying Possibilities	May 1, 2011	Farmers Institute, Islands Food, Ads in the Observer and HG Trader
2.3 Conduct Research on Agriculture Supply Stores on route to Vancouver	May 15, 2011	Farmers Institute, Islands Food, Phone Book
2.4 Advertise Truck Freight Sharing To and From Vancouver	June 1, 2011	Advertisements- Observer, HG Trader, Emails notices via Islands Food and Farmers Institute

Activity	Timeline	Resources
3.0 Organize Regular Tours of Local Food Producers' Organizations		
3.1 Contact Local Food Producers and Farms to Determine Interest	April 1, 2011	Farmers Institute, Islands Food
3.2 Organize Regular Routes	April 1-30, 2011	Farmers Institute, Islands Food, Ads in the Observer and HG Trader
3.3 Organize Lunch or Dinner Partnerships between Local Farms and local restaurants such as The Trout House	April 1-30, 2011	Farmers Institute, Islands Food
3.4 Advertise Tours	May-Oct 2011	Observer, HG Trader, Visitor Info Centres

Other business opportunities (ie: berry production, greenhouses, sheep etc) require follow up and can be found in the 'Opportunities' section of the Haida Gwaii Agriculture Strategy Background Document.

Marketing

Marketing Committee

Goal: To Increase Consumer Knowledge of and Interest in Local Agriculture

	Timeline	Resources needed
1. Branding & Marketing Local Food		
1.1 Hold brainstorming meeting with group -meet at Seedy Saturday-collect more feedback from local foods community	Feb. 26	Table fee/signage/feedback forms
1.2 Website overview-survey monkey-including name of group	10-Mar	Email Lists
1.3 Approve group's partnered web and printed program with HG Trader	Mar.15	Input from Group/ Written Proposal
1.4 Submit proposal/secure funding for group's partnered web and printed program with HG Trader	Mar. 25	Define Costs and Source Funding
1.5 Implement Group's partnered web and printed program with HG Trader	April.30	Input from Group if Clarification Points Arise During Implementation Phase
2. Agri-Tourism Initiative		
2.1 Hold two 'Local Food Tours' (North and South Island) featuring visits to local food producers, processors, and finishing with a local meal.	May 1st & May 8th	Personnel (Guides and Hosts)
3. Marketing Plan Preparation		
3.1 SWOT Analysis 'Benefits of Eating Locally'	Mar. 15	Internet, Input from Group

Planning for the Future of Food on Haida Gwaii

The action plans will be addressed throughout 2011. Some of the initiatives are currently being followed up on as a result of the momentum generated at the Future of Food on Haida Gwaii workshop.

Aside from the action items that were developed, there are many other important goals (see Appendix D of the Background Document) that will need addressing in our efforts to stimulate an agriculture industry on Haida Gwaii.

Following is a table illustrating opportunities available for local food producers based upon the difference between current consumption and production shortfall.

Examples of a few foodstuffs successfully produced on Haida Gwaii:

Total Amount Consumed (2010 Food Producer Surveys)	Present Production Shortfall	Economic Opportunity (based on local market sales)
Potatoes – 200,000 lb.	-178,000 lb.	@ 1.00/lb - \$178,000
Lettuce – 47,000 lb.	-Winter and spring lettuce needed – 37,000 lb.	@\$2.00/lb- \$74,000
Carrots – 52,000 lb.	-45,000 lb.	@\$2.00/lb- \$90,000
Squash - 19,000 lb.	-15,000 lb.	@\$1.50/lb.- \$22,500
Beets- 7,000 lb.	-3,000 lb.	@ 2.00/lb. - \$6,000
Eggs- 104,000 dozen	-67,000 dozen	@\$5.00/dozen-\$335,000

As a means to initiate discussion with respect to potential agricultural land in proximity to communities, a number of plots were identified for ground-truthing purposes (based on CLI data and public information).

Data pertaining to these plots can be found in Appendix E of the Background Document.

The key to successfully developing the agriculture industry will be to provide food producers with the educational and technical supports they require and to assist them in accessing

affordable land for the purpose of food production. It will also be important to educate the public on the merits of buying local.

The Haida Gwaii Agriculture Strategy and Implementation Plan documents priorities identified by the public, for developing an agricultural industry on Haida Gwaii. Opportunities in various areas of agriculture are identified as are the recommendations from areas with similar climate (ie: sheep production, berry production, greenhouse construction and greenhouse production).

Agriculture Advisory Committees

Agriculture Advisory Committees (AACs) are designated by local governments in order to ensure that the interests of agriculture are represented at the local political level. The committees are usually made up of individuals representing local farming, commodities, processing, residents, business and local government. The AAC can make recommendations, draft bylaws and have input into land and zoning decisions.

The Investment Agriculture Foundation of BC requires that an AAC be established in a community if that community is considering requesting funding for a formal Agricultural Plan. In so doing, the Investment Agriculture Foundation is ensuring that agriculture has a voice at the table in local decision making.

Conclusion

There is great potential for Agriculture to contribute to the Haida Gwaii economy, the health of our residents, the security of our food and the vitality and spirit of our communities. A clear agriculture strategy outlining the paths and safeguards we need to make today to ensure food security tomorrow is one of the greatest gifts we can give the generations that follow. As Wendell Berry would say:

*We have ahead of us a lot of hard work that we are not going to be able to do with clean hands.
We had better try to love it.*