REGIONAL DISTRICT OF NANAIMO

AGRICULTURAL ADVISORY COMMITTEE
FRIDAY, APRIL 5, 2013
2:00 pm

(RDN Committee Room)

A G E N D A

PAGES

CALL TO ORDER

Welcome new Agricultural Advisory Committee members.

DELEGATIONS

MINUTES

3-6 Minutes of the Agricultural Advisory Committee meeting held June 22, 2012.

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

7-17 New Directions from ALC (August 2012).

18-21 BC Agri Tourism Alliance – Re: Highway Signage for Agritourism (January 2013).

22-64 Vancouver Island Coast Regional Agricultural Framework for Action (August 2012).

UNFINISHED BUSINESS

REPORTS

Adopted Agricultural Area Plan (AAP) – separate attachment

65 Regional Agricultural Advisory Committee Workshop

RDN Agricultural Land Use Inventory and Water Demand Model (verbal report)

66-71 Revised AAC Terms of Reference

ADDENDUM

BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

72-131 Urban Farming Guidebook

NEW BUSINESS

ADJOURNMENT

IN CAMERA

Distribution: D. Johnstone (Chair), H. Houle, J. Fell, C. Springford, K. Reid, A. Brown, C. Evans, A. Benson, J. McLeod, R. Wahlgren, W. Haddow, L. Rowett, J. Holm, P. Thompson, T. Armet, P. Thorkelsson, G. Keller

REGIONAL DISTRICT OF NANAIMO

MINUTES OF THE AGRICULTURAL ADVISORY COMMITTEE MEETING HELD ON FRIDAY, JUNE 22, 2012 AT 2:00 PM IN THE RDN COMMITTEE ROOM

Present:

Director D. Johnstone	Chairperson
Director J. Fell	Electoral Area F
C. Evans	Representative (South)
A. Benson	Representative (South)
C. Springford	Representative (North)
A. Brown	Representative (North)
K. Reid	Representative (North)
R. Wahlgren	Representative (North)

Also in Attendance:

W. Haddow	BC Ministry of Agriculture
S. Kass	Vancouver Island Exhibition
K. Streeter	Vancouver Island Exhibition
B. Veenhof	Director, Electoral Area H
P. Thorkelsson	General Manager of Strategic and Community Development
J. Holm	Manager, Current Planning
L. Rowett	Senior Planner
N. Hewitt	Recording Secretary

Regrets:

Director B. Dempsey	District of Lantzville
J. McLeod	Representative (South)

CALL TO ORDER

The meeting was called to order at 2:08 pm by the Chair.

DELEGATE

Karen Streeter, Vice President and Stephen Kass, Treasurer, Vancouver Island Exhibition, re Verbal Update on Plans for Future Use of the VIEX Agricultural Buildings.

Mr. Kass provided a brief overview of the goals and objectives of the VIEX and updated the committee on potential uses for the proposed VIEX Agricultural Buildings.

MINUTES

MOVED J. Fell, SECONDED C. Springford, that the minutes of the Agricultural Advisory Committee meeting held on April 27, 2012 be adopted.

CARRIED

REPORTS

Agricultural Land Use Inventory / Water Demand Model Project.

MOVED J. Fell, SECONDED C. Springford, that the presentation be received.

CARRIED

Survey Results for Agricultural Area Plan and Media Coverage.

MOVED C. Springford, SECONDED J. Fell, that the presentation be received.

CARRIED

Draft Agricultural Area Plan and Summary of Revisions.

The Committee received the Draft Agricultural Area Plan dated June 15th, 2012 and a summary of revisions since May 1st, 2012 draft. The Committee considered further revisions to the plan based on survey feedback.

MOVED C. Springford, SECONDED J. Fell, that Vision Statement be revised to:

> *"Agriculture and aquaculture in the region will be valued and farmland will be protected from development. Residents will recognize agriculture and aquaculture as important industries and will respect the role of food producers within both rural and urban settings. Farms will be affordable and profitable and apprenticeships and other training programs will be locally available so that younger generations will be able to join a thriving industry. Alternative land tenure arrangements for housing family and workers on farmland will be common practice. More collaboration will occur between stakeholders and communities to promote shared resources and develop value-added products. Sustainable farming techniques will be elevated and supported. All levels of government will provide expertise and support for agriculture and aquaculture through: the provision of extension services and information; proactive planning for infrastructure, emergency management, and climate change; and the creation of bylaws and streamlined regulations that support agriculture and aquaculture".*

CARRIED

MOVED A. Brown, SECONDED K. Reid, that the following statement be included in the Introduction:

> *The Agricultural Area Plan supports both agriculture and aquaculture (as defined in the Plan) and recognizes that there are potential sources of conflict between the activities of these industries, in particular the issues of water use and the potential effects of runoff*

from agricultural and urban land uses into aquaculture sites. The recommendations and actions outlined in the AAP endeavour to address these potential conflicts in a proactive manner in support of both agriculture and aquaculture and to encourage better communication between the two industries. For example, refer to actions 1.3G, 2.2F, 2.5D, 4.1B, 4.1F, 4.2B, and 7.1D.

CARRIED

MOVED J. Fell, SECONDED C. Evans, that the following statement be incorporated into Section 1.0 – Introduction:

The relationship between food production to food consumption provides us with a theoretical estimate the local food capacity of a region. However, it can be challenging to obtain accurate numbers regarding current levels of local food consumption vs. production vs. capacity. Furthermore, the types of crops being grown change rapidly according to market conditions. Most regions do not contain enough nutritional variety to form a complete diet (Morrison, 2011). Some studies have been completed to perform statistical analysis to compare food capacity between Local Health Areas (which make up the Regional Health Authorities) in BC (Morrison, 2011; Morrison, Nelson, and Ostry, 2011). Results from these studies suggest that food capacity on Vancouver Island is more limited than that of the Northern and Peace Region, the Okanagan, and the east Fraser Valley.

CARRIED

MOVED R. Wahlgren, SECONDED C. Springford, that the following paragraphs be inserted into Section 5.1 after paragraph 2 to explain the purpose and history of the ALR:

Up to the 1970s nearly 6,000 hectares of prime agricultural land were lost each year to urban and other uses. The Provincial government responded by introducing BC's Land Commission Act on April 18, 1973. The Land Commission, appointed by the Provincial government, established a special land use zone called the "Agricultural Land Reserve". The Act required that the ALR be technically based on biophysical characteristics as outlined by the Canada Land Inventory mapping system. These preliminary technical maps were prepared by the provincial Ministry of Agriculture.

In BC, most soils were mapped for agricultural capability ratings in the 1980s, and these maps remain in use throughout the province. Throughout the 1980s, significant funding was allocated to develop a more detailed set agricultural capability maps to assist with fine-tuning the ALR boundaries in cooperation with municipal and regional district planning efforts (Smith, 2007). Sixty percent of all land excluded from the ALR was approved in the first 10 years (1973-1983) a time of "sorting out" in which the Commission undertook an ALR enhanced fine tuning program and partnered with several local governments in ALR reviews (Smith, 2007).

Reference:

Smith, B. E. 2007. "A Work in Progress—The BC Farmland Preservation Program," in *Farmland Preservation Land for Future Generations*, eds. W. Caldwell, S. Hilts, and B. Wilton (Guelph: Centre for Land and Water Stewardship).

CARRIED

MOVED J. Fell, SECONDED C. Evans, that the following paragraphs be inserted at the end of Section 1.0 - Introduction highlighting the effort of private enterprise in ensuring the viability if local agriculture and aquiculture:

> *While the RDN is spearheading the creation of the AAP, the implementation will require the collaboration of a host of individuals and organizations. These include farmers institutes, commodity groups, private industry, community food action groups, environmental NGOs, academic institutes, and provincial and federal government agencies. Therefore, the RDN itself is not solely responsible for the outcomes of the AAP. Many of the recommended actions identify the RDN in a supportive role rather than a lead role, and several actions don't involve the RDN at all. In order for the AAP to be successful it will require leadership and action from all of those involved in the local food system.*

CARRIED

MOVED J. Fell, SECONDED A. Brown, that Recommendation 5.3B be amended from "medium" to "high" priority and to state:

> *Investigate opportunities to connect regional composting and zero waste initiatives with the current nutrient cycling (composting) needs of farmers and aquaculture operators so that excess waste can be made available to those in need of extra nutrients. Identify any regulatory impediments that may exist in achieving this goal.*

CARRIED

MOVED J. Fell, SECONDED R. Wahlgren, that Key Players will be added as required and as appropriate. Additional funding agencies will be considered in the context of the recommended actions and will be added to Section 9.2) Funding Resources sections of the AAP.

CARRIED

MOVED R. Wahlgren, SECONDED C. Springford, that the Agricultural Advisory Plan be deemed as a "Living Document".

CARRIED

MOVED K. Reid, SECONDED R. Wahlgren, that the Draft Agricultural Area Plan dated June 15, 2012, as amended be received and forwarded to the Regional Board upon completion of the final revisions with a recommendation that the Board adopt the Plan.

CARRIED

ADJOURNMENT

MOVED J. Fell, SECONDED K. Reid, that this meeting be adjourned.

CARRIED

Time: 4:01 pm

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CHAIRPERSON

PROVINCIAL AGRICULTURAL LAND COMMISSION

MESSAGE FROM THE CHAIR
August 23, 2012

CHANGING THE WAY WE DO BUSINESS: AN UPDATE ON THE TRANSITION OF THE AGRICULTURAL LAND COMMISSION

I. THE NEED FOR CHANGE

On November 26, 2010, in my role as Chair of the Agricultural Land Commission (ALC), I issued a report laying out a strategic vision for the ALC. That strategic vision was based on two fundamental propositions.

The first proposition is that the ALC's mandate – to preserve agricultural land, to encourage farming on such land in collaboration with other communities of interest and to encourage all governments to accommodate farming in their planning processes – is as important today as it was when the Agricultural Land Reserve (ALR) was created almost 40 years ago. As noted in my report, there continues to be overwhelming support for the ALR. That support reflects a consensus within society about the importance of preserving a stable and coherent agricultural land base in British Columbia.

It is widely understood that there are serious challenges to the preservation of British Columbia's limited agricultural land base. Those factors include urban sprawl, increasing populations, changing weather patterns, competing land uses and land speculation. People readily understand that, in addition to the critical importance of the $10.5 billion agri-food sector to the provincial economy, food security is not something we can take for granted in British Columbia.

The second proposition on which my report was based is that if the *Agricultural Land Commission Act* (*ALCA*) is to truly achieve its purpose, the ALC itself must be effective. Like any other organization or business, the ALC must be willing to adapt to changing circumstances, and must be willing to re-examine previous ways of doing business. It is not good enough to operate a certain way because that is the way it has always been. It is not good enough to avoid change because some people do not support change, or because their vested interests are

affected. It is not good enough to allow the work demands related to one part of the ALC's mandate (for example, the consideration of non-farm use, subdivision and exclusion applications) to unduly take away from other important statutory responsibilities such as policy and planning, and compliance and enforcement. The ALC has to look for creative ways to become more efficient, and has to make hard decisions about how to triage and use its resources.

In September 2010, the Auditor General of British Columbia produced a report that examined the ALC and made 9 recommendations. These recommendations encouraged the ALC to be more proactive with local government planning processes, to have a sufficiently robust compliance and enforcement scheme, and to fully evaluate decisions with a view to reviewing our overall policy direction.

The 20 months since my report was submitted have only reinforced the need for the ALC to introduce changes to the way it does business. The ALC has had time to reflect on the Auditor General's report and my November 2010 report, and to consider the legislative changes passed in November 2011 to allow the ALC to better manage parts of our workload. I consider it appropriate now to publicly outline the changes we have decided to make in order to better achieve our mandate under the *ALCA*.

II. THE NOVEMBER 2010 CHAIR'S REPORT

My report set out a "Strategic Vision for Future Generations", with the following components:

1. ***An ALR that has defensible boundaries.*** The boundaries of the ALR, and any decisions to change the boundaries, should be based upon a consistent method of evaluating scientific and technical information. The boundaries should be defensible in order to discourage speculation and the proliferation of non-farm uses and subdivisions that erode the agricultural land base and drive up agricultural land prices. Communities should be encouraged to adopt compact and efficient development patterns that minimize pressure on the ALR boundary.

2. ***An ALR that places agriculture first.*** The use of lands for agriculture should take priority over all other uses within the ALR. Although the ALR permits many non-farm uses and may protect other public values that occur within it, it is first and foremost a working agricultural landscape. The ALC must have adequate resources to advocate for farmers, ranchers and the agricultural industry to encourage farming.

3. ***An ALC that places priority considerations on bona fide farmers and ranchers, and issues that may impact, positively or negatively, bona fide farmers and ranchers***. (This requires) flexible, risk-based approach to reviewing and deciding upon proposals that are intended to support and enhance bona fide farms and ranches.

4. ***An ALC that builds strong alliances with farm and ranch groups and other organizations to identify and cooperatively address emerging issues that may impact, positively or negatively, bona fide farmers or ranchers***. Through regular communication and consultation, the ALC will be better positioned to participate at an early stage in dialogue on issues of importance to farm and ranch communities.

5. ***An ALC that is able to respond to and enforce against improper use of ALR land***. Ensuring that ALR lands are being used properly will maintain a high quality land base for farming and reduce the potential for lands to be degraded to the extent that they can no longer be used for agricultural production. The ALC must continue to strive to build partnerships with other government agencies and local governments to assist in compliance and enforcement related matters.

6. ***An ALC that moves away from being reactive and focused on applications towards becoming a proactive planning organization.*** This shift would allow the ALC to proactively seek opportunities to improve agricultural land preservation and utilization, encourage farming, and focus on emerging and strategic issues.

7. ***An ALC that has up-to-date technology***. To use technology to integrate mapping (spatial) information with the ALC's database for research, planning, ALR boundary assessments and business reporting. To seek partnerships with other provincial ministries and agencies to share data to further enhance the ALC's technical capacity for research, planning, ALR boundary assessments and business reporting.

My report candidly states that in order to achieve many of these objectives (particularly items 1, 5 and 7 above), sufficient funding and resources are necessary. In this regard, a very positive development was the November 2011 legislative amendments that created the possibility of a fee schedule to establish a "user pay" funding model to generate revenue to augment the ALC's base budget appropriation. The ALC awaits advice from Government regarding further developments with regard to this reform.

The ALC is committed to proceeding with our strategic vision, even if this means having to engage in a triage process where lower priority matters give way to allow higher priority matters to be properly addressed.

Part of the reason for this message is to explain to certain stakeholders – particularly those involved in the "application" side of our mandate – why their applications may in future be processed differently. On the positive side, we believe this realigning of priorities to be more consistent with our overall mandate and responsibilities, and will lead to a revitalized and proactive ALC.

III. RE-ESTABLISHING THE ALC'S PRIORITIES

A disproportionate amount of the ALC's resources are consumed in dealing, on a reactive basis, with the numerous applications made by individuals each year to exclude, subdivide or authorize non-farm uses on ALR land. Dealing with the sheer volume of these applications – 500 to 700 new applications annually – consumes an enormous amount of ALC time and resources. Of these new applications we anticipate that approximately 25% will be the subject of a request for reconsideration (a follow up review of a denied application) which will consume even more ALC time and resources. Requests for reconsideration result in the annual application workload of the ALC increasing to 625 – 875 applications.

It is also a fact that a significant number of applications are nothing more than an attempt to gain a financial benefit from non-agricultural uses, or from removing land from the ALR. As stated in my report regarding land in the ALR "land speculation remains high after nearly 40 years".

The time has come for the ALC to take control of our agenda and workload. To avoid remaining a largely reactive organization whose priorities are dictated by the volume of applications received, the ALC has had to seriously re-think the resource allocation given to applications relative to other functions.

The ALC has determined that we can no longer afford to be an organization that spends 80% of its time dealing with applications to the detriment of other important areas of our mandate. Within the scope of resources that can be devoted to applications, we need to look beyond a simplistic "first in time, first in line" approach to doing our work and examine other process models based on priority and triage. Finally, we need to do everything we can to ensure that when dealing with applications, our decision-making remains principled, professional, consistent and timely.

The ALC will in good faith continue to perform our duty to consider each application on its merits as appropriate, but it makes no apologies for undertaking and prioritizing work based on a considered assessment of resources and priorities.

IV. RE-ALLOCATING THE ALC'S RESOURCES

A. Planning

The *ALCA* states that a local government's bylaws (including a regional growth strategy, official community plan or zoning bylaw), and a first nations government's laws, must be consistent with the *ALCA*, the regulations and the orders of the ALC. If those laws or bylaws are inconsistent with the *ALCA*, the regulations and the ALC's orders, they are "to the extent of the inconsistency, of no force or effect": s. 46. The ALC has an important role to play in consulting with local governments to ensure that their bylaws are valid and do not contravene s. 46.

In addition, section 882(3) of the *Local Government Act* requires local governments to refer official community plan bylaws to the ALC for comment if the plan applies to land in the ALR. Section 879 of the *Local Government Act* also allows local government to consult with the ALC more generally regarding official community plans. All these powers are directly related to the ALC's mandate to encourage farming and to encourage local governments and first nations to enable and accommodate farm use of agricultural land. As part of the planning process, the ALC needs to encourage communities to adopt compact and efficient development patterns that minimize pressure on ALR boundaries.

The ALC has in the past devoted insufficient resources to these critical planning functions resulting in adverse downstream effects on many of the ALC's objectives, including promoting the use of ALR land for agriculture, preventing unnecessary urban/rural conflicts, discouraging speculative applications, and minimizing enforcement issues. The ALC has also faced significant challenges participating in provincial land use planning, resource management and major infrastructure development.

Proactive ALC participation with local governments and provincial ministries, agencies and Crown Corporations provides considerable help to these valued stakeholders who may not be well briefed on agricultural issues. Such proactive planning requires early and regular ALC communication with local government planners, provincial government representatives and

elected officials. This reflects the ALC's larger responsibility to communicate with and educate local communities and provincial ministries, agencies and Crown Corporations regarding the *ALCA* in particular and agriculture generally.

In the ALC's view, the time has come for our planning mandate to have greater prominence, with the following elements:

- Ensuring earlier and more extensive involvement in local government planning processes;
- Ensuring earlier and more extensive involvement with provincial ministries and agencies, and Crown Corporations in land use planning, resource management and major infrastructure planning and development;
- Encouraging local governments to develop and adopt more detailed, agriculturally-focused implementation plans and strategies, such as Agriculture Area Plans and Agricultural Strategies;
- Encouraging local governments to establish Agricultural Advisory Committees;
- Updating "off the shelf" services for local governments, including the ALC's *Planning for Agriculture* document;
- Identifying priority areas for ALR boundary reviews; and
- Expanding joint Ministry of Agriculture and ALC efforts regarding "strengthening farming" legislation: *Farm Practices Protection (Right to Farm) Act.*

B. Policy

The ALC's policy role is closely related to its planning mandate. At the present time, the ALC has policies that outline principles, guidelines, strategies, rules or positions on various interpretative, operational, and fill and soil removal issues. These policies seek to provide clarification of regulations and courses of action consistently taken or adopted, formally or informally. While policies do not have the same status as laws, they are nonetheless extremely important to assist the ALC in developing plans and encouraging farming.

ALC commissioners and staff have a wealth of knowledge and experience to bring to policy development, but that resource is not currently being harnessed owing to the reactive demands on the ALC. Proper policy work cannot be undertaken off the "side of the desk", and it is not

assisted by having to be developed on an ad hoc basis in response to a pressing need. To be of greatest value, policies that encourage farming need to result from active engagement with stakeholders and the collection of proper data and research, including analysis. The time has come to devote more of the ALC's resources to our policy role.

C. ALR Boundary Reviews

Responsibility for revising the ALR's boundaries rests with the ALC. This role, which the ALC may exercise proactively by way of boundary reviews, is linked directly to the ALC's responsibility to preserve agricultural land.

The ALC initiated a number of boundary reviews throughout the 1980s, but the resources to undertake that work was eliminated by 1990. The ALC today recognizes that the most realistic approach to boundary reviews is to take a more modest and targeted approach based on the areas in greatest need of review.

Any boundary review process requires great care. A boundary review is a superior method for "fine-tuning" ALR boundaries than adjudicating hundreds of disparate applications. The ALR will have greater integrity, and fewer applications will be generated, where boundaries are proactively reviewed to assess whether land is, or is not, appropriately designated as ALR land. At the same time, the purpose of a boundary review must be clear. A boundary review process cannot be allowed to turn into a debate about whether there is a "higher or better use" for agricultural land, or about whether a particular farm is economically viable. As the Courts have recognized, the ALC's duty to preserve agricultural land requires us to take a longer term view, and to recognize that land not suitable for one agricultural purpose today may well be suitable for another agricultural purpose tomorrow.

ALR boundary reviews can generate a great deal of interest, and controversy. It is imperative that such reviews be conducted in an open and transparent manner by engaging local governments, agricultural organizations, other stakeholder groups and the general public. It goes without saying that even a modest boundary review will require the allocation of considerable resources.

D. Compliance and Enforcement

The ALR will retain its integrity only if individuals comply with the prohibition against using ALR land for non-farm uses.

The threat of prosecution is not enough to dissuade some people from breaching the *ALCA*. For that reason, in 2002 the ALC was given additional powers to ensure compliance, including the power to inspect land, to issue "stop work" and remediation orders, and to levy administrative penalties.

While the ALC has already established a partnership with the Ministry of Forest, Lands and Resource Operations and there are opportunities to partner with local governments and other provincial ministries, the ALC recognizes that we must have the ability to act when outside help is unavailable.

The ALC has determined that resource allocation to compliance and enforcement activities must be given higher priority than some types of applications. The ALC's re-allocation of priorities will reflect this reality.

E. Applications

The *ALCA* currently allows several different types of applications to be made to the ALC. These include an application to authorize a non-farm use, and applications to subdivide or exclude land from the ALR.

The ALC application process has remained essentially unchanged since 1975, during which time we have considered almost 40,000 applications. As noted earlier, the ALC currently receives between 500 – 700 new applications per year plus requests for reconsideration.

As discussed earlier, the reality is that the ALC will no longer allow the purely reactive role of dealing with applications to drive our allocation of priorities. This means three things.

Firstly, applications as a class will in future receive a lower relative share of the ALC's overall resources. Instead of application work accounting for 80% of the ALC's budget, the ALC is initially targeting to have that work account for 30% of our budget.

Second, applications will not be addressed according to a simple "first in time" rule, but rather according to the priority of the application, after a screening process that takes into account the nature and purpose of the application and the application's potential to encourage farming and the larger purposes of the *ALCA*.

Finally, within the targeted 30% budget allocated to application work, the ALC must find creative ways to increase our efficiency by streamlining the processing of applications.

To achieve the streamlining objective, several initiatives are being given active consideration; some are underway. One involves creating an application process – in due course, a fully electronic one - that places the onus to provide all relevant information on the person making the application. The days of the ALC helping to "perfect" an application cannot continue. As with all other federal and provincial regulatory processes in which persons seek an approval or a benefit, the onus must be on the person applying to provide all required information. If an application is materially incomplete it will not be processed until the required information is provided by the applicant. While it may in the past have been seen as a helpful public service for ALC staff members to "shore up" deficient applications made by landowners, this is no longer economically feasible.

Other initiatives will also be taken. One will involve an effort to educate local governments regarding applications that are and are not properly prepared. Others will involve changes within the ALC process, including eliminating the ALC staff report to the extent that it merely duplicates information in the file, improving the ALC's information management systems (as funds are available), applying the ALC's reconsideration power according to the language and intent of the reconsideration power in the *ALCA*, and improving the decision-making process through ongoing training of commissioners and organization of panels. The ALC believes that these changes, together with the new power to refuse repeat applications for non-farm use, subdivision or exclusion made within 5 years of a previous application (s. 30.1), will go a long way towards allowing us to make the best use of the resources that can be allocated to applications.

V. TRANSITIONAL PROJECTS SUPPORTING THE ALC'S RE-ESTABLISHED PRIORITIES

In support of re-establishing the ALC's priorities we have embarked on a number of significant projects using the transitional funding provided by Government which is available to the ALC until March 31, 2013. The ALC has the following transitional projects underway:

- Updating ALR boundary review procedural manual to provide clear and concise guidance regarding the methodology to be employed for reviews and to ensure boundary reviews are conducted in an open and transparent manner;

- Upgrading information technology and information management capabilities of the ALC's Online Application Tracking System (OATS);

- Designing and building a web-based application portal and client self-help kiosk to provide enhanced web services to clients and greater access to information. Establishing the ability to file applications electronically will further reduce the amount of ALC resources devoted to processing applications as the person(s) wishing to file an application will not be able to do so until all information is completed in the form and content acceptable to the ALC. The onus of completing a thorough and well documented application will be placed on the person(s) making the application;

- Populating the ALC database with information from approximately 25,000 applications to provide the ALC and its clients with greater access to information;

- Scanning historical documents from the 25,000 applications to provide the ALC and its clients with greater access to information;

- Digitizing and quality assurance review of historical mapping of the 25,000 applications;

- Digitizing agricultural capability mapping to provide the ALC and its clients with greater access to information. This mapping will also form the technical foundation for ALR boundary reviews; and

- Preparing a compliance and enforcement procedural handbook.

VI. CONCLUDING COMMENTS

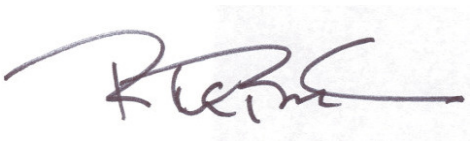
It is admittedly unusual for an administrative tribunal to provide this kind of public statement to explain the reasons for changing the way it does business. However, the ALC recognizes that we are an important regulatory institution within British Columbia, and that if the changes we have set in motion are to be understood, they must be explained.

This message seeks to reflect our respect for the Auditor General's constructive recommendations, for the stakeholders whose views contributed to my November 2010 report (and whose views continue to assist the ALC), for the Minister and Government which considered my report and passed the November 2011 amendments to the *ALCA*, and for the public that the ALC ultimately serves.

We will, as part of our ongoing annual reporting, continue to report on our progress in carrying out the changes announced in this message and the status of the transitional projects, the details of which will be announced as and when appropriate.

As well, when the ALC is provided more certainty from Government regarding the funding model to augment provincial funding, more changes and additional projects will be undertaken to sustain the momentum now underway to enhance the ALC's ability to preserve British Columbia's agricultural land and encourage farming.

Finally, the changes and transitional projects form part of a new and exciting chapter in the history of the ALC; they are just the beginning.



Richard Bullock, Chair
Provincial Agricultural Land Commission

January 2013

Dear fellow Agritourism Stakeholders:

Your feedback is requested for developing an improved highway signage program for agritourism in BC.

Since 2006, the BC Agritourism Alliance (BCATA) has worked with the BC Ministry of Transportation & Infrastructure (MOTI) to promote tourism and economic development within BC.

As you may know, the MOTI is responsible for highway signs and has the discretion to determine whether to install and maintain signage on provinicial highways.

MOTI has worked with BCATA to respond to industry requests for highway signage within this program. Presently, MOTI is refreshing their Service & Attraction Sign (S&A) program. Internationally recognized symbols will be used (sample below) and available to qualifying agritourism operations in Spring 2013.

This internationally recognized symbol will allow tourists and local visitors across the country to more readily identify agritourism operations. The signage will not include any other logos or business branding. This signage program will be available to all associations and independent agritourism operators in BC.

Costs for these new signs, installation and removal will be paid for by MOTI. Existing signs will be grandfathered until repairs or replacements are needed.

BCATA is reaching out to BC agritourism type associations and businesses to develop guidelines for the types of agritourism operations that should be included in this program. It is our intent to be as inclusive as possible without compromising quality standards required to create and maintain positive visitor expriences.

We are volunteering our time to request your input on the types of agritourism operators in your area and/or who belong to your association/society who offer positive and memorable visitor experiences. Once this information is received, the scope of the highway agritourism program will be developed.

Quality standards that reflect the essence of this program include:

- Adequate parking
- Bathrooms
- Consistent opening hours

Please help us provide inputto the program that meets your needs and those of our paying customers. Please forward us a list of the range of agritourism businesses and activities of your agritourism operators. This information will be collated and analyzed to develop recommendations for defining the criteria of the agritourism component of the S&A program .

This information will be used only for the purposes as outlined in this letter and will not be shared with any other party.

The "new" definition/criteria will be used by MOTI to help define who is eligible to receive a new S&A sign under the agritourism initiative.

Other service and attractions participating in the highways signage program inlcudes farmers markets, wineries, on-farm B&B's, golf courses, waterslides, etc.

For any questions and to respond, please email BCATA before January 15, 2013.

Thank you.

Sara Norman, President, BCATA
Wendy Taylor, Vice President, BCATA

Hewitt, Nicole

From: Rowett, Lainya
Sent: Tuesday, March 19, 2013 2:55 PM
To: Hewitt, Nicole
Subject: FW: BC Highway sign programme - Deadlined - January 15

From: BCATA [mailto:info@bcagritourism.ca]
Sent: Thursday, January 24, 2013 12:38 PM
To: Holm, Jeremy
Cc: Rowett, Lainya; 'Sara Norman'
Subject: RE: BC Highway sign programme - Deadlined - January 15

Hi Jeremy,

Thank you so much for sending along this information and we are delighted that you forwarded our letter to your Agricultural Advisory Committee. I hope that they will forward it to the region's operators, too. Their input is invaluable.

We will stay in touch in the future and I am pleased that we can count on your support,

Kind regards,

Wendy Taylor | Planit Network | PlanitBC.com | T. 604.926.9071 | M. 604.764.9071
BC Agritourism Alliance - Vice Chair

From: Holm, Jeremy [mailto:JHolm@rdn.bc.ca]
Sent: January-15-13 11:28 AM
To: info@bcagritourism.ca
Cc: Rowett, Lainya
Subject: BC Highway sign programme - Deadlined - January 15

Sara/Wendy,

The attached referral was forwarded to us. Although we are not an agritourism operator and therefore not likely an intended recipient, we thought it would be worthwhile passing along some comments and what little information we have. We have also taken the liberty of forwarding your letter to members of our Agricultural Advisory Committee (AAC), as they may have comments personally, or know of regional agritourism operators who may want to get involved in the initiative. It's great to see that such and initiative is being undertaken at a provincial level. The RDN Board recently adopted an Agricultural Area Plan (AAP). If you are interested in viewing the plan please see: http://www.growingourfuture.ca/index.asp

Our AAC members will be well aware of the need for improvements to agricultural related signage and the need to address regulatory barriers to agricultural related signage, as these issues were raised during development of the AAP by a number of stakeholders and have been included as implementation action items in AAP. The AAP also supports agritourism through other action items such as the development of farm tours and the development of a local food guide.

While the RDN does not have business licensing and does not have a specific list of agritourism operators at this time, we do have a stakeholder list that includes a number of agritourism operators. The list we have was taken from the following website, which I pass along for your reference: http://www.oceansidecoalition.org/index.php?p=1_8_Local-food-producers

We would be interested in keeping abreast of progress on your initiative and if you are planning to email those responding in the future, we would be happy to be on the email list. Please feel free to contact me if you have any questions regarding the above.

Cheers,
Jeremy

Jeremy Holm, RPP, MCIP
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BRITISH COLUMBIA

NEWS RELEASE

For Immediate Release
2012AGRI0033-001223
Aug. 25, 2012

Ministry of Agriculture
Ministry of Jobs, Tourism and Innovation
Island Coastal Economic Trust

Government charts course for agricultural growth on Island

COMOX – With the release of the new Vancouver Island Coast Regional Agriculture Framework for Action, producers now have a valuable tool to help them take advantage of the many opportunities presented by the growing trend of buying local food.

The government of B.C. and Island Coastal Economic Trust supported the development of the Agricultural Framework to assist the many regions that have identified agriculture as a priority to diversify their economies. The goal is to highlight common themes in local agricultural plans, inspire discussion around co-operative strategies, and provide recommendations to strengthen regional agricultural business development and co-operation across the region.

The report covers Vancouver Island north of the Malahat and includes Powell River, the Sunshine Coast and the Upper Gulf Islands. It identifies significant growth opportunities for the industry, especially mid-sized farms with current revenues between $10,000 and $100,000. It also highlights the potential to increase production by using more of the agricultural land base for food production, improving the land through irrigation and growing higher value crops.

To assist local government and key stakeholders, the framework identifies specific, targeted actions to move regional agriculture planning forward. It supports the area agriculture plans of many local governments including Comox Valley, North Cowichan and the Cowichan Region, Powell River, Denman Island, Campbell River, Nanaimo and the Alberni Valley.

Many of the report's recommendations are being addressed by work currently underway through the government's Agrifoods Strategy, including the commitment to build support for local foods, consumer education and sustainable farming.

Partners in the project include the Island Coastal Economic Trust, Ministry of Agriculture and the Ministry of Jobs, Tourism and Innovation.

Quotes:

Minister of Agriculture Don McRae –

"There is tremendous potential for agricultural growth in the Vancouver Island Coast region. This report will help producers take advantage of those opportunities, which will build the regional economies, help families maintain their rural lifestyles and provide consumers with local products."

Minister of Jobs, Tourism and Innovation Pat Bell –

"Agrifoods has been identified as a key growth sector in the BC Jobs Plan, and its clear from the report that the Island Coastal region can play a significant role in the future of economic development and job creation in B.C."

Phil Kent, chair, Island Coastal Economic Trust –

"ICET is pleased to be working with the Province to develop this report, which views the agriculture sector through an economic development lens. The framework will provide the region, key stakeholders and the trust with valuable tools to foster more resilient, sustainable and financially successful agriculture businesses, which in turn will play a greater role in diversifying our regional economy."

Ian Christison, Morningside Farms –

"The local governments, regional economic development and agriculture community have been working for more than a decade to ensure the sustainability of agriculture in this region. The aims and objectives of the framework mirror those actions identified in the various area plans."

Quick Facts:

- The Vancouver Island Coast Regional Agriculture Framework for Action covers the Island Coastal Economic Trust's mandate area. It begins north of the Malahat and includes the Regional Districts of Cowichan Valley, Nanaimo, Alberni Clayoquot, Comox, Strathcona, Mount Waddington, Powell River, the Sunshine Coast and the Upper Gulf Islands.
- Farms in the Vancouver Island Coast region generate over $118 million in economic activity per year (2011).
- Island farmers produce a wide diversity of products including beef, poultry, berries, tree fruit, corn, hops, grapes and medicinal herbs.
- Many Island-grown foods are used on the island to create artisanal, value-added foods such as cheese, wine, cider and spirits, jams, sauces and honey.

The recommendations in the report focus on:

- Strengthening farm organizations.
- Recruiting and supporting new farmers.
- Reducing operating costs.
- Improving access to and use of capital.
- Improving productivity of farmland.
- Maintaining and encouraging growth of forage-based livestock products.
- Expanding consumer education and outreach.
- Improving marketing of regional agricultural products.
- Improving access to the mass distribution system.
- Protecting the environment.

Learn More:

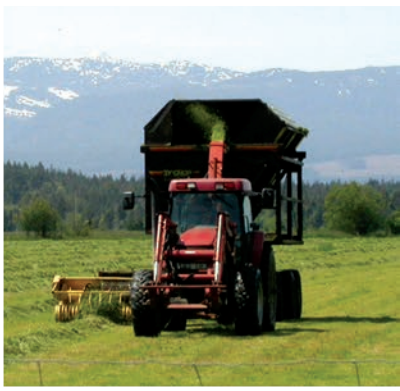
To view a copy of the Vancouver Island Coast Regional Agriculture Framework for Action: http://www.gov.bc.ca/jti/ (Click on Reports and Publications.)

Media Contact: Robert Boelens
Communications
Ministry of Agriculture
250 882-2485

Connect with the Province of B.C. at: www.gov.bc.ca/connect

Vancouver Island
Coast Regional Agriculture

Framework for Action



Island Coastal
ECONOMIC TRUST

BRITISH COLUMBIA

ACKNOWLEDGEMENTS

The Vancouver Island Coast Regional Agriculture Framework for Action was prepared for:

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Vancouver Island Coast Regional Agriculture Framework for Action

Island Coastal Economic Trust

British Columbia

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EXECUTIVE SUMMARY

The Province of British Columbia has identified agri-foods as a key growth sector in the BC Jobs Plan. As well, many regions have identified agriculture as a priority to diversify their economies. Working together and independently, local and regional governments and farm associations have drafted plans, reports, scoping documents, strategies and recommendations to support agricultural development. However, they face significant challenges in implementing plans on a regional basis.

Less than one third of agricultural land is actively farmed and opportunity exists to increase the intensity of current farming.

The *Vancouver Island Coast Regional Agriculture Framework for Action* is an attempt to push through many of those challenges. It provides an overview of the agricultural industry in the Vancouver Island Coast region – the mandated area of the Island Coastal Economic Trust. It covers Vancouver Island north of the Malahat, the Northern Gulf Islands, Powell River and the Sunshine Coast, and is based on a comprehensive review of local and regional agriculture plans, analysis of Census statistics, consultation with stakeholders and the experience of the consultants and committee members. The goal is to highlight common themes in local agricultural plans, inspire discussion around cooperative strategies and provide recommendations to strengthen regional agricultural business development and cooperation across the region.

Sector Overview

The agriculture sector in the Vancouver Island Coast region contributes about $112 million in direct annual revenue to the regional economy. The sector is very diverse in terms of agricultural products and the scale of farm operations. Well-established farms, 10% of the total, generate 80% of the revenue. Most farms are small, producing less than $10,000 per year, but a vibrant and growing number of farms are expanding their business in response to consumer demand for high-quality, sustainable and locally grown food.

The sector produces 8 - 10% of the food consumed in the region. Less than one third of the agricultural land is actively farmed and the farmed area is not used as intensively as it could be. The average revenue is $1,106 per hectare in the ALR, compared to $12,550 in the Fraser Valley. The livestock industry in the region has declined in the past two decades because of high local input costs, especially for fertilizer and feed grains and, to some extent, reduced consumption. However, increases in horticultural crops (fruit, berries, vegetables) have more than made up for the drop in livestock revenue. The soils and climate in the area will support a very wide range of products, and there is very significant potential to grow the industry by both expanding into land not currently used for agriculture, and better utilizing farmland already under cultivation.

There are three types of farms in the Vancouver Island Coast region, generating $112 million in economic activity (2006):

- 62% of farms earn less than $10,000 per year. Owners are motivated by lifestyle, not economics. These farms generate less than five per cent of the agriculture revenue in the region.
- 28% of farms are developing businesses, earning between $10,000 - $100,000 per year. They generate 14 per cent of the agriculture revenue in the region.
- 10% are established commodity farms, earning more than $100,000 per year. They generate almost 80 per cent of the agriculture revenue in the region.

Local and regional reports highlight the fact that there is significant potential to increase production by using more of the agricultural land base for food production, improving the land through irrigation and growing higher value crops.

28% of farms are developing businesses, earning between $10,000 - $100,000 per year. They generate 14% of the agriculture revenue in the region.

Recommendations and Next Steps

This Framework for Action supports the significant work already completed in communities by highlighting regional priorities in existing plans. It identifies 10 recommendations and suggests an Action Plan to spark discussion on moving forward at a regional level.

The recommendations in this report focus on:

- Strengthening farm organizations
- Recruiting and supporting new farmers
- Reducing operating costs
- Improving access to and use of capital
- Improving productivity of farmland
- Maintaining and encouraging growth of forage-based livestock products
- Expanding consumer education and outreach
- Improving marketing of regional agricultural products
- Improving access to the mass distribution system
- Protecting the environment

Many of these suggestions are straightforward, inexpensive and highlight coordination and education. They cross local borders, stimulating ideas and discussion, showing what is possible and how it can be achieved.

There is tremendous opportunity for growth in the agricultural sector in the Vancouver Island Coast region. It can create more jobs in small business, provide fresh, local produce to replace food that is imported and transported, and contribute to the overall economic health and quality of life in our communities.

INTRODUCTION

This report identifies a significant growth opportunity for the industry as a whole, and especially for the 28% of farms currently generating annual revenues between $10,000 and $100,000.

Communities in the Vancouver Island Coast region have identified agriculture as a priority in diversifying regional economies. Many local governments have invested significant time and energy in drafting Agricultural Plans, Agricultural Economic Development Plans and reports that identify and recommend actions to support agricultural development. Many recommendations are being implemented, while others are regional or provincial in nature, and cannot be implemented by single communities or regions.

In 2011, the Island Coastal Economic Trust, the Ministry of Jobs, Tourism and Innovation and the Ministry of Agriculture launched a review of local and regional agricultural plans. Common issues and opportunities were identified and a statistical analysis conducted to ensure that the information is consistent across the Vancouver Island Coast region.

The result is the *Vancouver Island Coast Regional Agriculture Framework for Action,* an overview of the agriculture sector in the region and economic development opportunities that could be implemented on a regional level. This report identifies a significant growth opportunity for the industry as a whole, and especially for the 28% of farms currently generating annual revenues between $10,000 and $100,000. The *Framework:*

- provides an overview of existing area agriculture plans;
- lays the groundwork to develop regional cooperative strategies that can strengthen and expand agricultural business development;
- begins the process of consulting and brainstorming with communities across the region.

The *Framework for Action* makes 10 recommendations and identifies specific, targeted actions to move regional agriculture planning forward.

PROFILE:
THE AGRICULTURE SECTOR IN THE VANCOUVER ISLAND COAST REGION

The Vancouver Island Coast Regional Agriculture Framework for Action covers the Island Coastal Economic Trust's mandate area. It begins north of the Malahat and includes the Regional Districts of Cowichan Valley, Nanaimo, Alberni Clayoquot, Comox, Strathcona, Mount Waddington, Powell River, the Sunshine Coast and the Upper Gulf Islands (Figure 1).

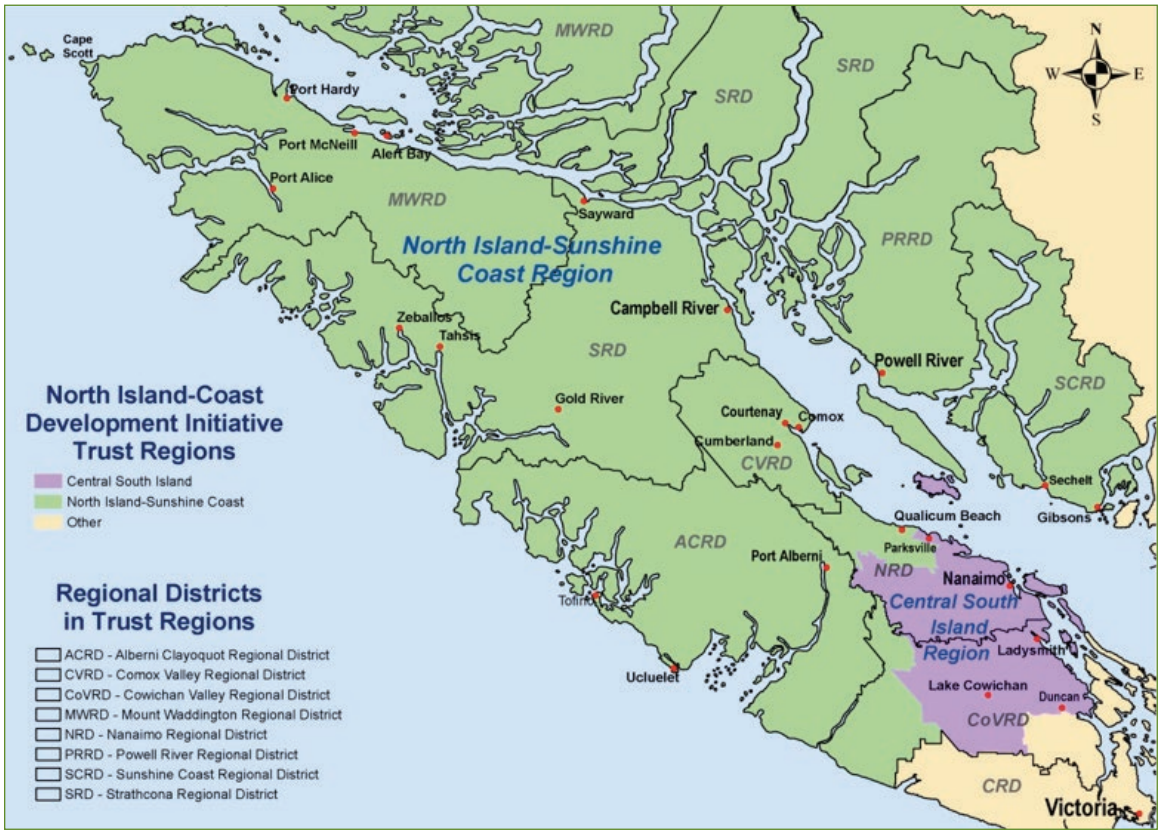

Figure 1: Island Coastal Economic Trust

While agriculture is a relatively small sector in the economy of the region, it is steadily growing. The area has the climate, soils and water to produce a diverse mix of agricultural products, and there is a large amount of underutilized or unused agricultural land. The industry tends to be more organic than other areas, and consumers actively support local food producers.

Farm Revenues

Farms in the Vancouver Island Coast region are predominantly family owned and operated, and most grow to the point where the workload can be managed by the family. Most are not full-time farmers and do not intend to grow their business.

Comparison of Vancouver Island farms (year 2005)

Area	Farm numbers	Gross receipts	Operating expenses	Gross margin %	Gross margin $	Ave GM $/farm	Ave Gross receipts/farm
Cowichan Valley	700	$47,554,455	$43,503,736	8.5%	$4,050,719	$5,787	$67,935
Nanaimo	461	21,186,317	21,274,867	-0.4%	-$88,550	-$192	$45,957
Alberni-Clayoquot B	89	5,491,456	5,068,237	7.7%	$423,219	$4,755	$61,702
Comox Strathcona	497	32,975,655	30,237,884	8.3%	$2,737,771	$5,509	$66,349
Powell River	85	1,921,378	2,253,346	-17.3%	-$331,968	-$3,906	$22,604
Sunshine Coast	96	$2,583,742	$2,486,876	3.7%	$96,866	$1,009	$26,914
Total for Study Area	1,928	111,713,003	104,824,946	6.2%	$6,888,057	$3,573	$57,942

Figure 2: Gross and Net Returns of Study Area Farms by Regional District (2006 Census)

On average, farmers keep only 6.2 cents from every dollar of sales.

Figure 2 shows the contribution of the agriculture sector to Regional Districts. Gross margins are relatively small and, in areas with a large number of small farms, negative[1]. On average, farmers keep only 6.2 cents from every dollar of sales.

While margins are low, the value of land continues to rise. For example in Cowichan, the average net operating income from 1986 - 2006 was only $219 per hectare – a very low rate of return. The average increase in farm assets, mainly land appreciation, over the same period was more than $2,000 per hectare per year.

Regional Economy

The agriculture sector in the Vancouver Island Coast region contributes about $112 million in direct annual revenue to the regional economy. The sector is very diverse, producing more than 200 different agricultural products. The scale of farm operations is also diverse. There are almost 2,000 farms in the region:

- Ten per cent are well-established, full-time commodity farms, generating 80% of the revenue. Their margins are stable or declining, and many are expanding to achieve more profit through economies of scale. These farms generate more than $100,000 per year.

1 While it may not seem logical for farms to continue to operate with negative margins, there may be taxation or lifestyle benefits or non-farm income that are not represented in these statistics.

- About 28% of the farms generate 12% of total revenue. Anecdotally, many of these are farms purchased by early retirees with capital, post-secondary education and management experience. These farms are growing in number and in their contribution to overall revenue. They are owner operated or family operated, have a clear business focus and generate between $10,000 - $100,000 per year.
- The majority of farms (62%) generate less than 8% of total revenue. In some cases, these provide important part-time income or tax benefits, but most are not motivated by income. They generate less than $10,000 per farm per year.

0.524 ha is the area required to produce a healthy diet for one individual – roughly the size of a football field.

Food Production

Producing food for residents in the Vancouver Island Coast region is at the heart of discussions about food security and the growth potential in the agricultural sector. In 2006, the average household (2.4 persons) in British Columbia consumed $8,000 in food per year. While a total of $1.4 billion in food was consumed, the total value of farm production was only $111.7 million.

Level of Self-Sufficiency	Current (2006): 10.9%	Target: 20%
Revenue generated - gross ($millions)	$112	$175
Revenue generated - per ALR ha	$1,106	$2,135
Water requirements (acre ft)	13,376	23,347
Greenhouse area (ha)	17.3	26.0
Cleared land (for food) required (ha)	23,224	42,992
Cleared land as % of ALR	28%	52%

Figure 3: Estimated current level of food self-sufficiency (10.9%) and the changes required to increase capacity to 20% self-sufficiency in Vancouver Island Coast region

Many Vancouver Island residents are interested in growing their own food, and community and kitchen gardens provide important lifestyle and educational opportunities for individuals. However, producing enough food to feed 781,313 residents in the Vancouver Island Coast region requires a sophisticated farming industry, one that can make the most efficient use of resources (land, water, fertilizer, labour, etc.) and still produce the volume of produce required. Encouraging movement of supply-managed quota allocations to the region would improve island food self-sufficiency and reduce unnecessary transport of some food products.

About 24% of the Agricultural Land Reserve is being actively farmed and opportunity exists to increase the intensity of current farming

The Vancouver Island Coast region has the soils, water and climate to produce a very wide range of product. About 24% of the Agricultural Land Reserve is being actively farmed and opportunity exists to increase the intensity of current farming. The average revenue is $1,106 per hectare in the ALR in the Vancouver Island Coast region, compared to $12,550 in the Fraser Valley.

Utilization of ALR Land

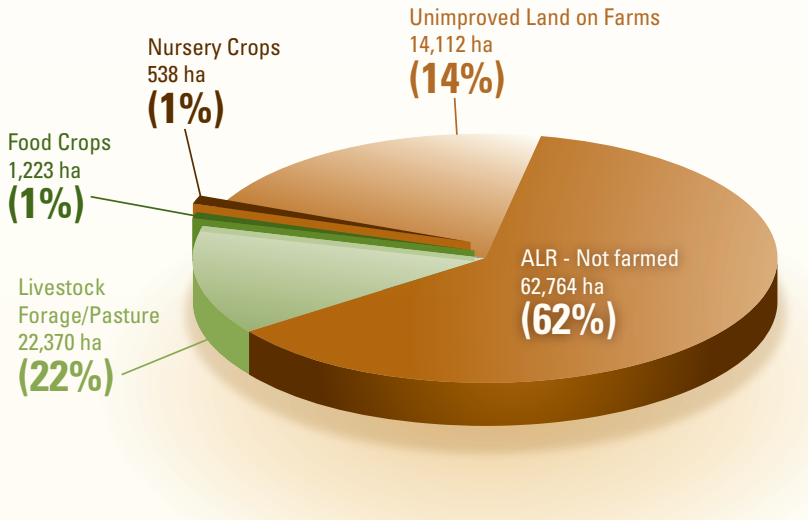

Figure 4: Agricultural land use in Vancouver Island Coast region. (Source: Reported land use by enterprise from 2006 Census vs. Total ALR Area from BC Agricultural Land Commission). Note: the vast majority of the ALR land, not farmed, is privately held forest land.

Production has shifted over the past decade. In 2001, 60% of industry revenue came from livestock and 38% from horticultural crops. By 2006 (Figure 5), livestock revenue dropped to 53% and horticulture crops (food and nursery combined) increased to 47%.

The livestock industry has been declining since the mid 1990s due to the high cost of feed, fuel and fertilizer, and changes in subsidy programs. Remaining farmers are consolidating to take advantage of economies of scale, moving to niche market products such as grass-fed beef or specialty poultry, or converting to higher-value horticultural crops.

2 The total area of all farms, according to the 2006 Census, was 38,243 ha (equivalent to 37.9% of the ALR land). However, only 24,131 ha (23.9% of ALR area) was reported to be used for agricultural crops of any kind (Figure 4). The other 14,112 ha of land within the land base of the Census farms was reported as "other or unimproved" implying that it has not been developed or is not actively used as part of the farm operation.

In contrast, the horticulture sector has grown with increases in berries, vineyards and wineries, direct farm markets and other niche market enterprises. This increase has more than offset the decline in livestock, and overall agriculture revenues are increasing.

Area Actively Farmed	Area (ha)	Revenue
Livestock forage/pasture	58%	53%
Horticulture - food crops	3%	30%
Horticulture - nursery crops	1%	17%
Other (unimproved) land	37%	0%
Total	100%	100%

Figure 5: Area used for livestock and horticulture production compared to estimated revenue (Source: 2006 Census area for crops; revenues are estimated based on average revenues per unit of production for crop and livestock enterprises)

Role of Government

Historically, the B.C. Ministry of Agriculture supported a developing agriculture industry in the form of extension services offered by a district agriculturalist. As the industry matured and diversified, extension activities became more targeted. They now include environmental farm plans, production insurance, risk management programs, farm business management activities, and food safety and traceability.

The horticulture sector has grown with increases in berries, vineyards and wineries, direct farm markets and other niche markets.

In 1996, the provincial government introduced the Farm Practices Protection (Right to Farm Act) to protect farmers' ability to farm while balancing concerns of the increasing urban population. The Ministry also supports industry-specific strategies and sector initiatives, including factsheets, production guides, workshops and web-based information, and is using new media technologies to help farmers find up-to-date and locally relevant information.

The Ministry of Agriculture and the Provincial Agricultural Land Commission continue to develop policies to strengthen farming. They offer assistance with business and environmental planning as well as income stabilization, which is generally co-funded with the federal government. In 2011, the province introduced property assessment and increased tax exemption amendments to encourage more intensive agriculture operations and provide property tax relief for retired farming families in the Agricultural Land.

Federally, the Canadian Food Inspection Agency (CFIA) and Agriculture and Agri-Food Canada (AAFC) provide programs related to food safety and trade. Provincially, the BC Ministry of Health is the lead agency for food safety in British Columbia. The Health Protection branch, working with the Centre

for Disease Control and the health authorities under the authority of the Food Safety Act and the Public Health Act, helps ensure the safety of food products beyond the farm- in processing facilities, food premises and markets- through legislation, inspection, policies and programs. The Ministry of Environment oversees regulations governing the use, management and disposal of waste materials on farms under the Environmental Management Act.

Since 2000, many local governments in the Vancouver Island Coast region have taken the initiative to support the agricultural sector. The Comox Valley, North Cowichan and the Cowichan Region, Powell River, Denman Island, Campbell River and the Alberni Valley have agricultural plans, and the Regional District of Nanaimo is in progress. Some local governments and/or economic development offices continue to provide economic development services and industry specific targeted workshops.

This Framework builds on the agricultural plans completed by local governments. It is an example of how collaboration between the Ministry of Jobs, Tourism and Innovation, the Ministry of Agriculture, the Island Coastal Economic Trust and local governments can support the development of the agricultural industry across the region.

The Vancouver Island Coast Regional Agricultural Framework for Action is a timely initiative. The BC Jobs Plan, released in September 2011, identifies agrifood as a key component in growing the provincial economy with the goal of expanding into emerging markets, particularly on the Pacific Rim. B.C.'s new agrifoods strategy, released in March 2012, charts a path forward to increasing local food production and processing, while supporting job growth and healthy communities.

Opportunities and Challenges

The review of existing agricultural plans and interviews with regional districts highlights the following opportunities and challenges facing the agricultural industry in the Vancouver Island Coast region.

OPPORTUNITIES

The area has the suitable soils, climate and water to produce a wide range of products, and there is significant development potential for farms in the region. Only about 24% of the existing farmland base is actively farmed, and most land could produce higher-value products. There is significant room to increase production by improving irrigation and drainage on existing farmland, and clearing additional ALR land of overgrowth.

The value of food production can be increased from $1,106 per hectare in the ALR to more than $10,000. This would bring the production value of the region closer to the rest of South Coastal B.C. For example, the Fraser Valley's food production level is $12,500 per hectare.

There is significant room to develop the consumer market. Only 8-10% of the food consumed in the region is produced by Island farms – 90% is imported. Residents support farmers in the region and are interested in buying more locally grown foods, reflecting concerns around food security and carbon footprint, a desire for organic foods and support for local food producers.

There is also tremendous opportunity for farmers who want to move into the business full time. Currently, the vast majority (62%) of farms generate less than $10,000 per year. When these underdeveloped farms are sold, new owners often bring fresh capital, management, ideas and energy, converting them into thriving businesses, generating more revenue, creating more jobs and growing more produce.

CHALLENGES

One of the biggest challenges facing farmers in the Vancouver Island Coast region is the absence of a single organization with the capacity or mandate to lead the development and implementation of a regional agriculture strategy. Many related organizations exist, but they have a specific focus based on geography, a commodity, scale of operations (small lot), production system (organic) or marketing system (Farmers' Markets).

Low profitability is a major issue for farmers. Farmers, especially new farmers with little equity, struggle to find capital to expand, improve the land or get better access to markets. On average, farmers in the region keep about 6.2 cents from each dollar of sales. A small increase in prices or reduction in costs can have a significant impact on the bottom line.

Only 8-10% of the food consumed on Vancouver Island is produced by Island farms – 90% is imported.

STRATEGIC FRAMEWORK FOR ACTION

The following 10 recommendations and accompanying action items are based on area agriculture plans developed by local governments in the Vancouver Island Coast region. These actions are suggested because they have a regional focus and are beyond the jurisdiction of any one community to implement effectively.

The Strategic Framework for Action is intended to generate discussion and creative thinking to strengthen farm businesses in the Vancouver Island Coast region. It does not address specific interests, such as dairy or organic farming, but identifies opportunities to develop the Vancouver Island Coast's agricultural sector from an economic development perspective. Communities are encouraged to identify the activities that they can introduce and implement, laying the groundwork to expand the agricultural economy.

General Support

1. STRENGTHEN FARM ORGANIZATIONS

Most agricultural areas in the Vancouver Island Coast region have a farmers' institute and many have agricultural advisory committees and farmers' markets, the majority of which are largely volunteer-led and have limited resources. Other organizations exist, but they usually focus on local issues or local marketing.

Many common issues could be addressed by collaboration and cooperation in the industry. Developing projects that have a regional focus and can be delivered by the local farm groups may bring diverse organizations together on common projects. It would improve access to local knowledge, which is especially important to new farmers, and helps farmers use production methods and varieties best suited to local climate, soils and markets.

Even with government programs in place, modest amounts of assistance could generate significant improvements to agriculture. Specifically, support is needed to organize activities and events that support the many diverse and small commodities that make up the region's agriculture sector.

1.0	Objective	Action	Stakeholder
1.1	Provide more support to existing farm organizations	Develop a list of organizations, roles and contact info involved in agricultural support activities	Vancouver Island Coast Economic Development Association
1.2		Survey the identified organizations to develop a needs assessment, identify priorities and develop delivery models. For example: identify key courses, workshops, etc. for delivery throughout the region, and develop an overarching educational program and suggestions for new courses. This would highlight gaps and reduce duplication	
1.3		Invite organizations to participate in events such as the Islands Agriculture Show in February 2012. These events could be the natural opportunity for an introductory facilitated planning session	
1.4		Identify opportunities for strategic partnerships among organizations, areas of mutual interest and benefit, subjects for joint projects and work	Vancouver Island Economic Alliance (VIEA)
1.5	Increase communication, knowledge and technology transfer	Assess existing web-based portals as a tool for connecting the industry and facilitating information and technology transfer with local content	
1.6		Determine value of developing a website dedicated to farmers in Vancouver Island Coast region	
1.7		Encourage new farmers and new arrivals to the region to join existing farm organizations and networking groups so they can benefit from the knowledge and the experience in the community	Farmers' market associations, farmers' institutes

Recruiting new farmers is key to the survival and growth of the agricultural industry in the Vancouver Island Coast region.

2. RECRUIT AND PROVIDE SUPPORT FOR NEW FARMERS

Recruiting new farmers is key to the survival and growth of the agricultural industry in the Vancouver Island Coast region. Farmers are getting older (average age 52 years) and the number of new entrants (under the age of 35) is declining. This trend is consistent throughout British Columbia and across Canada.

Many farmers do not operate as businesses and may not want to. Many agricultural plans note that often, farm operations shift when there is a new owner, or when there is a dramatic change in the lifestyle or career of the existing owner – i.e. retirement or a layoff.

Many new farmers do not have experience in agriculture, and local agricultural plans clearly indicate that there is a need for easily accessible and relevant local information. This could be addressed by strengthening farm organizations and improving access to online resources (see Recommendation 1).

2.0	Objective	Action	Stakeholder
2.1	To recruit new farmers	Develop a program to actively recruit new farmers from other areas based on the agricultural advantages of Vancouver Island Coast region. Messages could focus on relatively inexpensive and very productive land, available water, strong markets, good climate, etc.	Economic development officers, local realtors, chamber, forest companies
2.2	Training for new farmers	Develop a business leadership program targeted at farmers in the $10,000-$100,000 revenue category (See 1.2)	Financial, business and accounting institutions, educational institutions
2.3		Encourage economic development officers with websites to promote local farm organizations and their activities	Economic development officers
2.4	Encourage young people to become aware of career options in agriculture	Encourage and support community gardens and incubator farms as a way to provide practical education for future producers	Community food groups, Ag in the Classroom

Financial

Simply put, improving profitability is the most significant issue facing the agriculture industry in the region. If farming is more profitable, most other issues will solve themselves.

3. REDUCE OPERATING COSTS

Producers who can reduce costs or increase revenues, even by a small percentage, can dramatically improve a farm's profitability. A farmer who sells $100,000 with a 50% margin keeps as much as a farmer with $1 million in sales and a 5% margin. Joint purchasing of seed and fertilizer, for example, or increasing the scale of operations by leasing land instead of buying it, can help reduce operating costs.

Improving profitability is the most significant issue facing the agriculture industry in the region. If farming is more profitable, most other issues will solve themselves.

One of the long-standing issues for agriculture in the region is the lack of volume to support processing. Processing facilities will not be built until there are enough farmers to support them, but without more processing facilities, farmers will not increase production. For example in addition to lack of volume, the seasonal nature of livestock processing also poses a considerable challenge to both the farming and processing industries. Livestock production and livestock slaughter are co-dependent industries, but their objectives are not always aligned. In many regions livestock farmers cite a need for more slaughter facilities at peak times during the year, while processors cite a need for more livestock during the rest of the year. A fine balance is required in order that businesses in both industries can stay viable and serve each others' needs.

Island Agri-Food Initiative, an initiative of the Investment Agriculture Foundation of BC, has supported feasibility proposals. However, it is a challenge to develop a successful collaborative business model that provides processing capacity at prices that allow a reasonable return to farmers.

Many local plans highlight the potential for cooperation and joint use of processing facilities, community kitchens and incubator facilities as possible solutions.

Other challenges for small operators include meeting requirements for food safety and traceability, and the cost of organic certification.

3.0	Objective	Action	Stakeholder
3.1	Reduce operating costs	Bring financial experts and farmers together to identify specific inputs and/or assets that could be purchased or pooled to reduce production costs for local producers (See 1.2)	Farmers' institutes
3.2		Bring industry experts and farmers together to identify potential for beneficial re-use of waste products as energy sources on farms (See 1.2)	Economic development officers, BC Ministry of Agriculture
		Consult with government agencies and local government regarding the regulatory requirements	Ministry of Environment
3.3		Identify and prioritize a list of feasibility studies that could benefit custom operators at all levels of production, processing and marketing	Farmers' institutes and economic development officers
		Develop a Strategic Plan that prioritizes and links potential feasibility studies, identifies champions and/or sponsors and coordinates the study and outcomes	
3.4		Identify the need for workshops on existing programs: Agri-invest, Agri-Insure, Agri-Stability, Advance Payments Program, BC Food Safety Systems Implementation Program, etc. If there is a need, add workshops to overarching educational program (See 1.2)	Farmers' institutes with help from BC Ministry of Agriculture and Agri-Food Canada

Undercapitalized businesses have a higher risk of failure, and most local agricultural plans identify access to capital as a significant issue.

4. IMPROVE ACCESS TO AND USE OF CAPITAL

Undercapitalized businesses have a higher risk of failure, and most local agricultural plans identify access to capital as a significant issue. On-farm capital improvements (land clearing, drainage, buildings, equipment, etc.) may not be available unless farmers borrow against equity, and many are reluctant to do that.

In many cases, this is a management or risk-aversion issue, something careful business planning can address. Financial tools that can help farmers include:

- a viable business plan;
- leasing (to access land, buildings, equipment, etc.);
- patient capital loans; and
- cooperative uses of capital assets (equipment pooling, community kitchens/gardens, etc.).

4.0	Objective	Action	Stakeholder
4.1	Improve access to capital and/or free up capital for other uses on the farm	Promote business-planning workshops as a valuable tool for accessing capital (See 1.2)	BC Ministry of Agriculture (Farm Business Advisory Services program), lending institutions
4.2		Identify a team to research the feasibility of a micro loan program for farmers (see 3.1)	Farmers' markets, lending institutions, Western Economic Diversification Canada
4.3		Develop a lease registry to give new farmers access to land and existing farmers the opportunity to expand	Web portal, farmers' institutes, economic development officers
4.4		Research the potential use of underutilized infrastructure from other sectors, i.e. vacant cooler, freezer and storage space	Economic development officers
4.5		Work with the Ministry of Agriculture and Agricultural Research and Development Corporation to convey the advantages of Environmental Farm Plans; profile how the program provides access to capital for related improvements	Newsletters, testimonials, VI Agriculture Show

Productivity

Local agriculture plans identify the need to develop the agricultural resource base (land, capital and management) to increase production and/or efficiency.

5. IMPROVE THE PRODUCTIVITY OF FARMLAND

Access to water is identified as an issue in all agricultural plans in the region. Irrigation increases and stabilizes crop yields, increasing the income per acre and reducing the risk for farmers. It is critical when growing higher-valued crops. However, more outreach is needed to bridge the gap between increasing irrigation to expand agricultural development, and protecting water sources for environmental reasons.

Production can also be increased by improving drainage, a relatively low-cost effort that extends the growing season, increases yield, and promotes deeper root systems that better access nutrients and water in the soil. Other approaches include management improvements, use of greenhouses, housed livestock, improved use of inputs (fertilizers), identification of opportunities to convert locally-produced waste to fertilizer, and planting more productive and higher value crops.

More outreach is needed to bridge the gap between increasing irrigation to expand agricultural development, and protecting water sources for environmental reasons.

Soils along the east coast of Vancouver Island from the Malahat to the Oyster River and the Alberni Valley, were mapped at 1:20,000 scale in the 1980s, and the information has been very useful for planning land use and farm operations. These maps identify the main limitations on soil capability (too wet, too dry, too rocky, etc.), describe the soil characteristics, types of crops that can be produced and the inputs (seed, fertilizer, etc.) required. Several areas in region have not yet been mapped: Vancouver Island north of the Oyster River, Powell River and the Sunshine Coast and the Gulf Islands. Mapping these areas would provide critical information for future planning, expansion and agricultural development.

A survey of First Nations leaders has revealed that many Bands are investigating agricultural opportunities. Band resources, cultural focus and human capacity will influence how quickly these resources are developed.

5.0	Objective	Action	Stakeholder
5.1	Increase water available for irrigation	Encourage local governments to allow Agricultural Advisory Committees to represent the farming community in water management planning processes, including: • participating in water allocation discussions • planning upgrades to water delivery systems • planning development of new infrastructure	Local governments
5.2	Improve drainage of agricultural lands	Encourage local governments to appoint farmers to represent the agricultural community in water management planning processes, including: • making recommendations around stormwater management (do not flood lowland agricultural land) • developping policies that permit farmers to connect drainage improvements (tiles and ditching) to municipal and road ditch systems	Local government, Ministry of Transportation
5.3	Increase quantity or productivity of land used for agriculture	Map soils in unmapped areas (Powell River, Sunshine Coast, Gulf Islands, Campbell River)	Local government and economic development officers
5.4		Meet with forest companies to discuss potential for converting low elevation privately held “forest” land (much of which is in the ALR) with high agricultural value to agricultural use	

5.5	Investigate ways to lower the cost of production	Work with all levels of government and industry to investigate ways to develop island resources, lowering the cost of inputs such as nutrients and energy	Local governments, farms and BC Ministry of Agriculture
5.6	Create affordable land opportunities for new farmers	Support the use of incubator farms and link with urban organizations that support alternative land holding and tenure systems	BC Land Conservancy, Land Trusts local food groups, Island Agricultural Show
5.7		Work with First Nations to identify potential farming opportunities	Economic development officers, BC Ministry of Agriculture, First Nations team

6. MAINTAIN AND ENCOURAGE GROWTH OF FORAGE-BASED LIVESTOCK PRODUCTS

The livestock industry is declining because of poor profitability. Livestock operations generally need more land and land costs are higher than for horticultural operations. Revenues per hectare are lower and costs – especially feed grain, fertilizer and fuel – are increasing. If there is no economic use for forage, some of these lands will not be maintained for agriculture, making them more difficult to put back into production at a later date.

Dairy and poultry production is controlled by quota allocations. Quota producers work with a known value for their products regardless of where they locate. As a result, the only enticement to a particular area is a lower cost of production. A thorough analysis may help address the notion that it costs more to produce agricultural products on the Island and encourage more quota allocation back to the Island.

Another option is to develop a value chain or cooperative: a large cow calf operation could provide young animals for small farms to grow out to market weight, or small lot producers could produce calves for a community pasture, using home lands for winter feed. A cooperative could:

- allow producers to benefit from economies of scale;
- produce a consistent uniform product – such as grass-fed, grass-finished beef – to be marketed as a specialty product;
- maximize the dollars of product produced per hectare using a management intensive grazing system.

All of the local agriculture plans note the need for more consumer awareness about the contribution of local agriculture to the economy and environment.

6.0	Objective	Action	Stakeholder
6.1	Increase the scale of production of forage-based red meat	Support a feasibility study to look at opportunities to support the livestock and forage industries on the Island (See 3.3). Identify infrastructure, educational and stakeholder needs	Farm and industry organizations, processors, retailers Ducks Unlimited, economic development officers
6.2		Research the potential for community pasture operations with large landholders – private, forest companies and First Nations with suitable land available for this purpose (See 1.4)	Industry organizations with support from local government and economic development officers

Marketing

7. EXPAND CONSUMER EDUCATION AND OUTREACH

All of the local agriculture plans note the need for more consumer awareness about the contribution of local agriculture to the economy and environment. Public education campaigns can increase support for growing fresh, local foods in the region. Initiatives by the Ministry of Health, Ministry of Agriculture and other agencies make the link between healthy eating and environmental stewardship, drawing attention to the benefits and availability of locally grown food.

However, there is no coordinated approach among organizations to design and operate an effective public education and marketing campaign for the region, and most agri-food funding programs will not support marketing initiatives.

7.0	Objective	Action	Stakeholder
7.1	Build relationships between food producers and retailers	Host a meeting between the retail, restaurant sector and farmers to promote understanding of needs and issues	Industry and economic development officers, Vancouver Island Health Authority
7.2	Raise public awareness about local food producers	Support local festivals to celebrate local foods – include as many local agrifood and fish products as possible	Local groups

8. IMPROVE MARKETING OF REGIONAL AGRICULTURAL PRODUCTS

Direct marketing allows farmers to sell their product at retail or, in some cases, premium prices. This allows smaller scale farms to access consumer markets and enables consumers to connect directly with producers. Support for farm product and growers guides and online mapping of Direct Farm Markets and Farmers' Markets are valuable tools to increase sales. This, in turn, should lead to more intensive farming, greater sales and potential for profit.

8.0	Objective	Action	Stakeholder
8.1	Brand Vancouver Island Coast region as a producer of quality agrifood products	Hold a joint meeting of key stakeholder groups to discuss the viability of regional branding. Investigate existing provincial initiatives (See 1.4)	Farm organizations, Vancouver Island Coast Economic Development Association, tourism
8.2		Develop a plan to brand the region based on its unique characteristics for agriculture	Chamber activity, tourism, economic development officers
8.3	Expand and increase distribution of local Growers' Guides	Present a marketing workshop to discuss the "how to" of product guides. Deliver a course in social media and internet sales (See 1.2)	Economic development offices with support from educational institutes and industry
8.4	Farm Market and Growers' Guides	Identify areas without local growers guides. Work with local print media to develop print copy for distribution in local paper	Economic development officers, farmers' markets, farmers' institutes
8.5		Develop an online version of the Farm Market and Growers' Guides with farms mapped and profiled	Work with islandfarmfresh.com, economic development officers
8.6		Create an online farmers market-website that links suppliers to customers	Economic development officers, farmers' markets, farmers' institutes

Retail, food-service and institutional markets typically source very little food from smaller-scale producers in the Vancouver Island Coast region.

9. IMPROVE ACCESS TO THE MASS DISTRIBUTION SYSTEM

The support systems and infrastructure for collecting, storing, processing and distributing food to these markets have been established over many years, and operate efficiently at the national and often global level. Producers in the region have significant difficulty accessing this system because:

- many producers are too small to contemplate producing for or meeting requirements of established marketing and distribution systems;
- many producers in rural and outlying areas cannot efficiently transport product to a distribution point or center;
- producers do not fully understand distributor requirements. There are information gaps around labeling, quality control, traceability and food safety.

There are at least four major opportunities to build markets for farmers in the region:

- direct farmer-to-consumer sales (farmers' markets, farm gate, internet sales);
- retail sales (grocery stores);
- food-service sales (restaurants); and
- institutional sales (dining services in hospitals, college, schools and seniors centres).

9.0	Objective	Action	Stakeholder
9.1	Increase direct market sales on the Island	Offer courses to improve direct marketing at Farmers' Markets based on input from FMAs (See 1.2)	Economic development officers with support from education institutes and industry, based on farmers' markets
9.2		Research feasibility of establishing local grading and packaging facilities for local farmers and supply managers (See 3.3)	Local groups
9.3		Research the feasibility of small-scale food distribution approaches, such as U.S Food Hubs (See 3.3)	
9.4		Research electronic systems to link consumers and suppliers	Economic development officers
9.5	Develop ongoing short course type education programs for farmers	Work with farm groups and Island Ag Show organizers to identify high calibre speakers on marketing, distribution (See 1.2)	Economic development officers, Islands Agricultural Show, farm groups

9.6	Expand local-food job-training opportunities	Work with cooking and chef programs to educate students about local and seasonal products	Post-secondary institutions such as North Island College and Community Futures Development Association Vancouver Island Coast region
9.7	Create networking opportunities for farmers and the food industry	Support showcase events such as regional food and wine festivals to draw attention to the benefits of working collaboratively with farmers and the food industry	Economic development officers, farmers' institutes

Environment

10. PROTECT THE ENVIRONMENT

The agriculture sector on the Vancouver Island Coast region faces high feed, fertilizer, energy and transportation costs. Farmers have responded by focusing on the positive, replacing chemical fertilizer with locally produced organic fertilizer. The agricultural industry has developed as a niche, "near organic" sector, producing food that environmentally aware consumers demand.

The agricultural industry has developed as a niche, "near organic" sector, producing food that environmentally aware consumers demand.

Farmers in the region also use Environmental Farm Plans to improve disposal of organic nutrients and make better use of water resources.

10.0	Objective	Action	Stakeholder
10.1	Water	Support mapping at the regional district level that quantifies agricultural water needs	BC Ministry of Agriculture, Local governments, ag advisory committees
10.2		Sponsor workshops that promote the water-use calculator and irrigation efficiencies (See 1.2)	BC Ministry of Agriculture and ag advisory committees
10.3	Recycling, disposal and reuse efforts	Support local and regional recycling and disposal efforts for agricultural waste (plastic, pesticides, crop and wood)	Local government waste, farm organizations and NGO's
10.4	Water quality	Highlight farms with environmental farm plans that improve riparian protection or protect water quality	BC Agriculture Council, economic development officers, farm organizations
10.5	Wildlife	Identify, profile and support local, regional and provincial initiatives that manage wildlife impacts on agriculture	Farmers' institutes, BC Agriculture Council, wildlife organizations, BC Ministries of Environment and Agriculture

APPENDIX I: ADDITIONAL STATISTICS

Agriculture Land Reserve

The majority of agricultural land is on the coastal plain surrounding the Gulf of Georgia. From a regional perspective, the central east coast of Vancouver Island contains most of the land in the Agriculture Land Reserve (ALR).

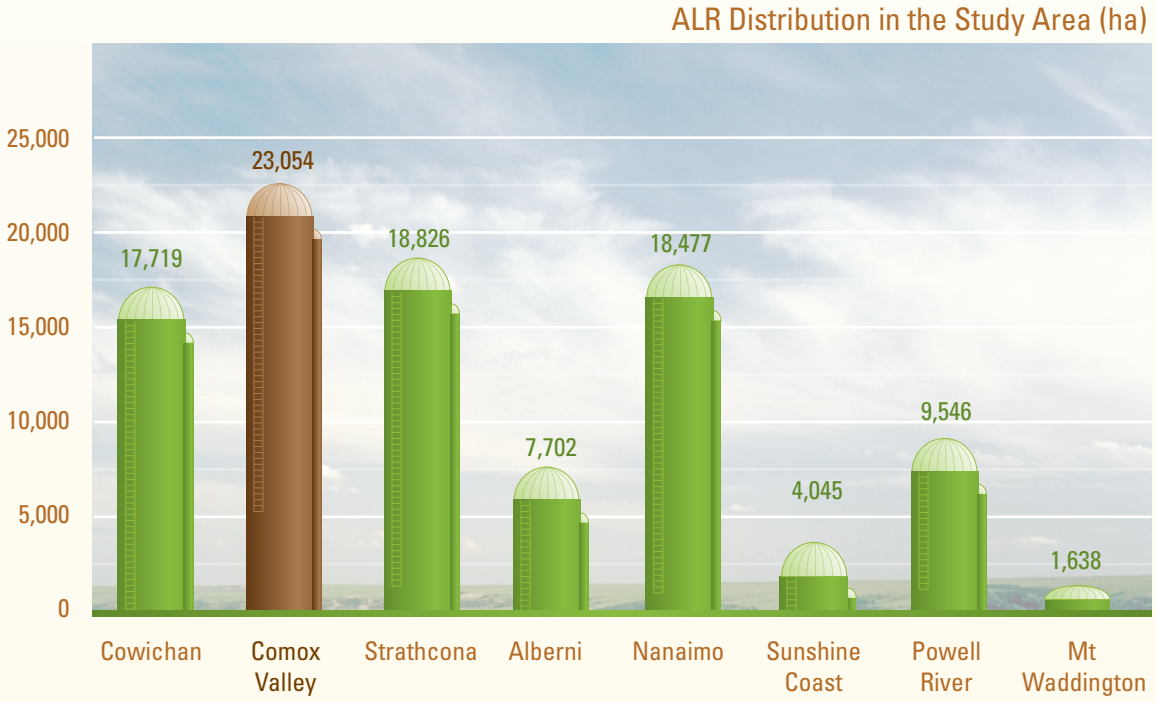

Figure 6: Distribution of agricultural land in the Vancouver Island Coast region - Hectares in the Agricultural Land Reserve (ALR) (Source: www.alc.bc.ca)

Population

Population in all jurisdictions of the Vancouver Island Coast region is increasing. From 2006 to 2010, population has increased by 92,807 or 7.8%.

Population by Regional District	2006 BCS	2007 BCS	2008 BCS	2009 BCS	2010 BCS
Cowichan Valley	78,471	79,564	80,967	81,796	82,871
Nanaimo	141,246	143,008	145,887	148,054	149,686
Alberni Clayoquot	31,078	31,141	31,438	31,582	31,635
Comox Strathcona	103,129	104,927	107,164	108,417	109,028
Mount Waddington	11,962	11,915	11,955	12,058	12,057
Powell River	19,694	19,793	20,028	20,234	20,455
Sunshine Coast	27,959	28,592	29,201	29,589	29,984

Figure 7: Population by Regional District (BC Statistics)

Population Distribution

The majority of the population (75%) is concentrated on the East Coastal Plain between Mill Bay and Campbell River (Figure 8).

When the distribution of ALR in the Vancouver Island Coast region (Figure 6) is compared to the population distribution (Figure 8), it reveals that potential consumers (population) are relatively close to the producers (agriculture sector). This provides a strong opportunity for direct marketing of fresh farm produce and products.

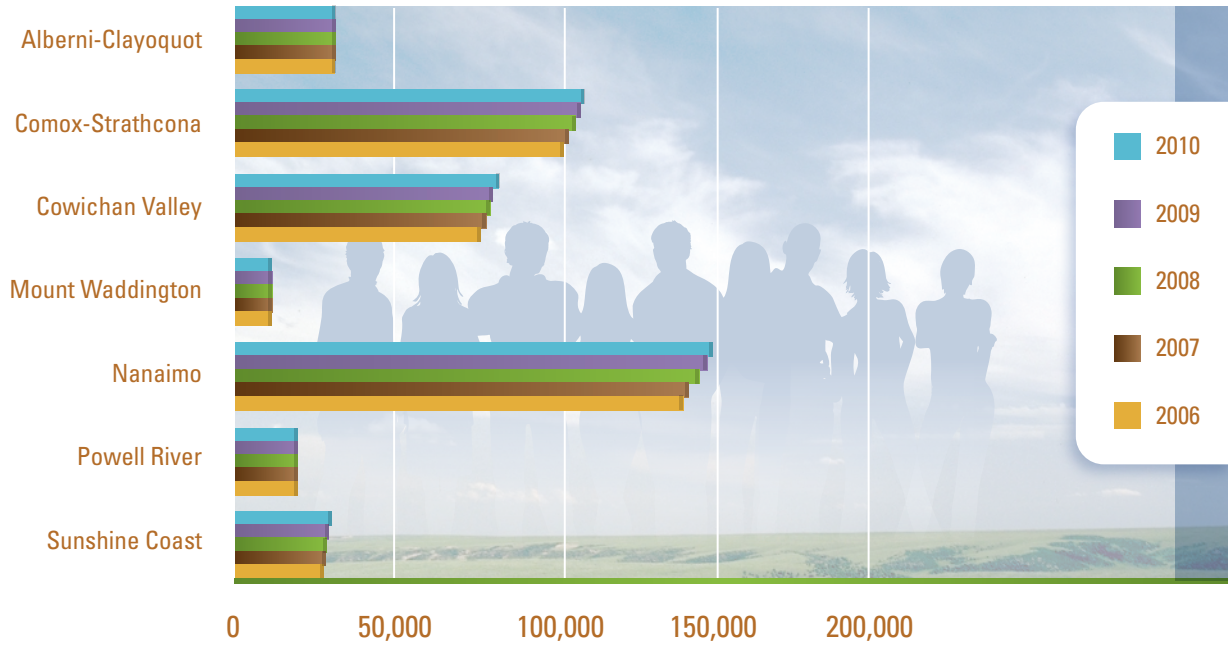

Figure 8: Current and past population distribution (BC Statistics)

For comparison purposes, the Capital Region population for 2010 is estimated to be 372,339; just 15% less than that of the rest of Vancouver Island and the Sunshine Coast combined.

Value of Food Grown and Food Consumed

The value of food produced in the Vancouver Island Coast region is 8% of the value of food consumed (Figure 9). About 91% of the production is in three Regional Districts (pie chart on the right in Figure 9): Cowichan, Nanaimo and Comox-Strathcona.

The vast majority of the food consumed is imported into the area, mainly by ferry, from distant markets. The opportunities to support and promote locally produced food will increase as cost and environmental impact of transportation continue to rise.

The average household (2.4 persons) consumes $8,000 in food per year. Based on 2006 statistics a total of $1.4 billion in food was consumed whereas total value of farm production for the same period was $111.7 million.

Note that the percentage of local food or the processed value of local food that is included within the $1.4 billion of food consumed on Vancouver Island is unknown.

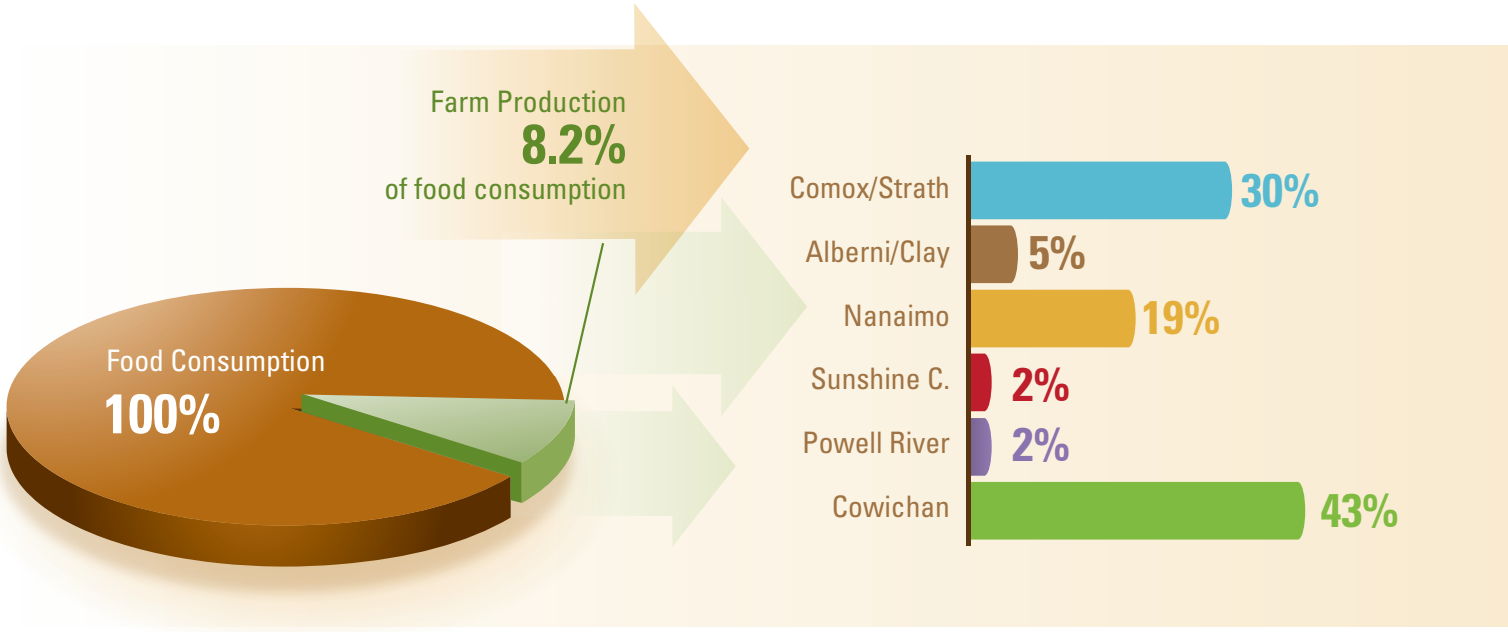

Figure 9: Local production by Regional District (2006 Census)

Annual revenue

The average farm in the Vancouver Island Coast region generates approximately $58,000 in gross annual receipts, or about $1,106 per hectare of land in the ALR (Figure 10). The most intensive farming is in the Cowichan Valley, where the average farm generates nearly $70,000 in gross annual receipts – equivalent to $2,684 per hectare ALR.

By way of comparison:

- Capital Regional District averages $54,754 per farm ($3,180 per hectare ALR);
- Central Okanagan averages $84,787 per farm ($3,307 per hectare ALR);
- Fraser Valley averages $306,932 per farm ($12,550 per hectare ALR).

Generally, the soils and climate in the Vancouver Island Coast region are similar to the Fraser Valley, indicating a clear potential to increase the value of food production.

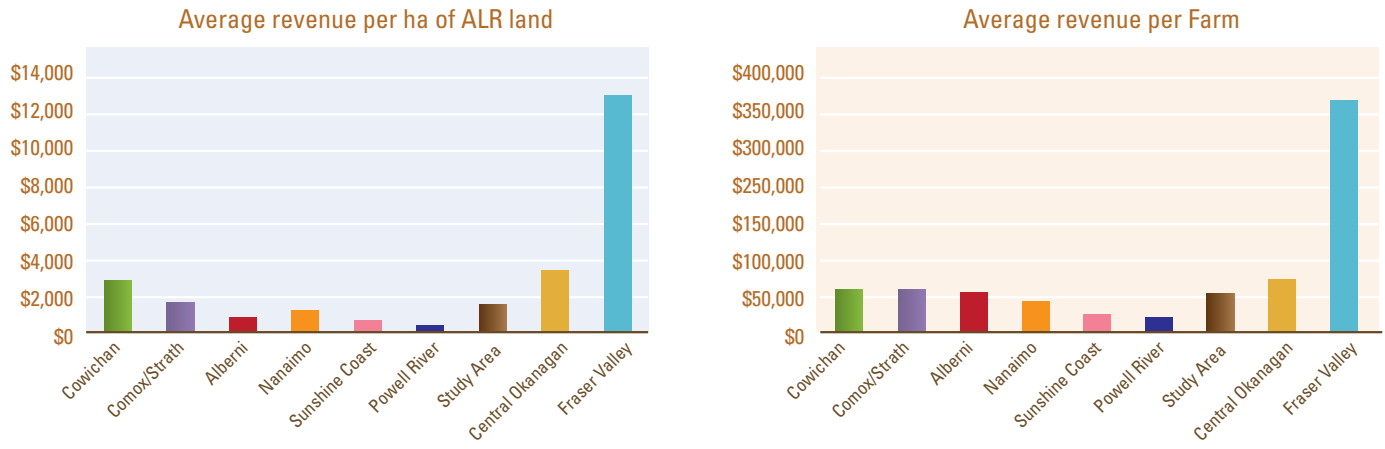

Figure 10: Production Intensity – Comparisons by Regional District (2006 Census)

As noted in Figure 9, the amount of food produced is 8% of the food consumed in Vancouver Island Coast region. To measure food self-sufficiency, the BC Ministry of Agriculture developed a model that estimates that 0.524 hectare of land (irrigated and non-irrigated) is required to produce a healthy diet for one person to live for one year. Using this model, the existing cleared agricultural land base can produce 10.9% of the food needed to sustain the population (Figure 10). Moving from 10.9% self-sufficiency to a target of 20%, for example, would require doubling current production. The amount of ALR land, of cleared land, and water required would also almost double (Figure 3).

Land Use – Crop Production

The types of crops being produced on ALR land within the Vancouver Island Coast region and the extent of farming activity in the ALR are reflected in Figure 11.

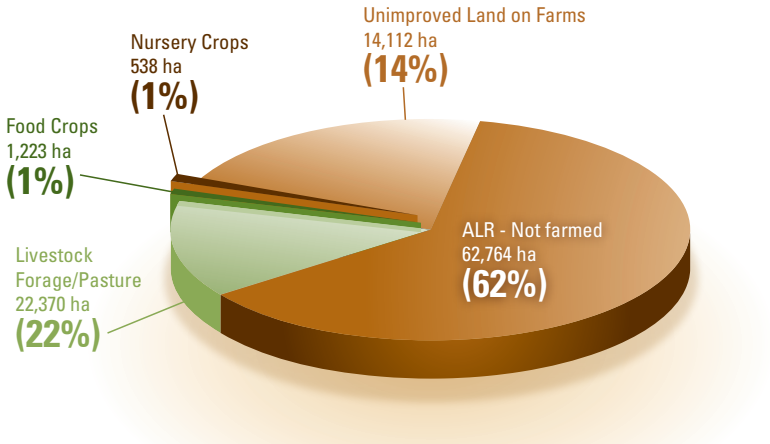

Figure 11: Agricultural land use in Vancouver Island Coast region (Source: Reported land use by enterprise from 2006 Census vs. Total ALR Area from BC Agricultural Land Commission)

The percentage of actively farmed area used to produce crops and the estimated total revenue from those crops in the study area is shown in Figure 12. The revenue is based on average yields and prices in the region. In the case of livestock, it is the estimated farmgate value of livestock products, including milk and eggs. About 58% of the actively farmed land, 22,370 hectares, is used to produce feed for the livestock industry. The livestock industry (especially dairy, pork and poultry) has been in decline because of the high cost of concentrated feeds (grain), which are brought from the Prairies. The dairy and beef sectors have shifted towards producing higher quality forages, locally, to cut costs and remain competitive.

Figure 12: Area actively farmed on Vancouver Island Coast region

Area Actively Farmed	Area (ha)	Revenue
Livestock forage/pasture	58%	52%
Horticulture - food crops	3%	30%
Horticulture - nursery crops	1%	17%
Other (unimproved) land	37%	0%
Total	100%	100%

Horticultural crops (fruits, vegetables, berries, greenhouses and nursery) use about 4% of the actively farmed area and generate 47% of the agricultural revenue. This sector is expanding fast enough to offset the loss of revenue from livestock production so overall revenue from the agriculture sector is increasing.

Size and Scale of Farming Operations

There is a wide variation in the economic scale of farms within the Vancouver Island Coast region (Figure 13). Most farms, 1,206 of the 1,928 farms (or 62%) generate less than $10,000 in annual gross revenue. Combined, these farms produce less than 8% of the $112 million generated by the sector. On the other end of the spectrum, 184 farms (<10%), with sales over $100,000 annually, produce 80% of the revenue. The middle group of farms, with sales between $10,001 and $99,999, includes 538 (28%) farms which, collectively, gross over $15 million in revenues – about 12% of total revenue.

For the purpose of this document, the farms described above fit into three categories of farming operations:

- Part-time Farm Operators – This group has annual sales of less than $10,000 in gross receipts per year. They represent 62% of the farms, but generate less than 8% of industry income. The number of farms changed by less than 1% between the 2001 and 2006 Census. These farms are not economically motivated; they are lifestyle based and/or may be benefit from agricultural tax benefits.
- Developing Farm "Businesses" – This group generates between $10,000 and $100,000+ in gross receipts per year. They represent 28% of the farms, but generate 12% of industry income.
- Established Commodity Farms – These are large, well-established farms producing for commodity markets and selling into the mass distribution system. They generate from $100,000 into the millions of dollars per year. They represent 10% of the farms, but generate over 80% of industry income. They are growing in size (acreage), scale (revenue) and number of farms.

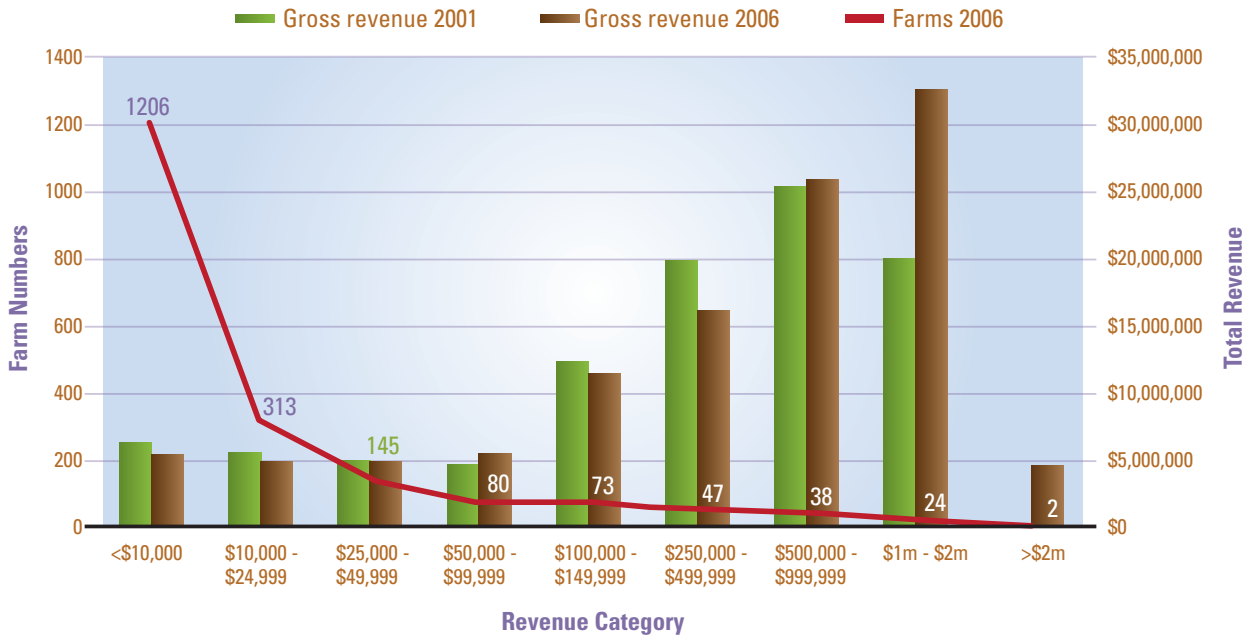

Figure 13: Variation in scale of farms compared to cumulative revenue based on farm size.

Given that the number of developing farms is increasing and their contribution to the economy is increasing, it is suggested that the greatest potential for increasing industry income over time will come from the developing farm "business".

Employment in the Agriculture Sector

Statistics Canada reports the number of weeks of employment in the on-farm and off-farm worker (paid and un-paid). This calculation provides a reasonably accurate assessment of work performed on farms and in farm-related manufacturing.

The *British Columbia Labour Market Outlook 2009-2019* indicates that there are and will continue to be, more farm worker recruits than there will be demand for the workers. However, at times, farms requiring seasonal harvesters or workers access such resources as the Temporary Foreign Workers program.

The agriculture industry on Vancouver Island is dominated by owner-operators (family farms), which grow to the point where they can do most of the farm work within the family unit, augmented with temporary employees in peak season. Only 41% of farm operators earn their entire living from the farm; given that there is an average of 1.5 operators per farm, the number of farms with no off-farm income is likely less than 30%.

Figure 14 indicates a total of 2,875 persons are working in the industry – 68% of these are owner operators.

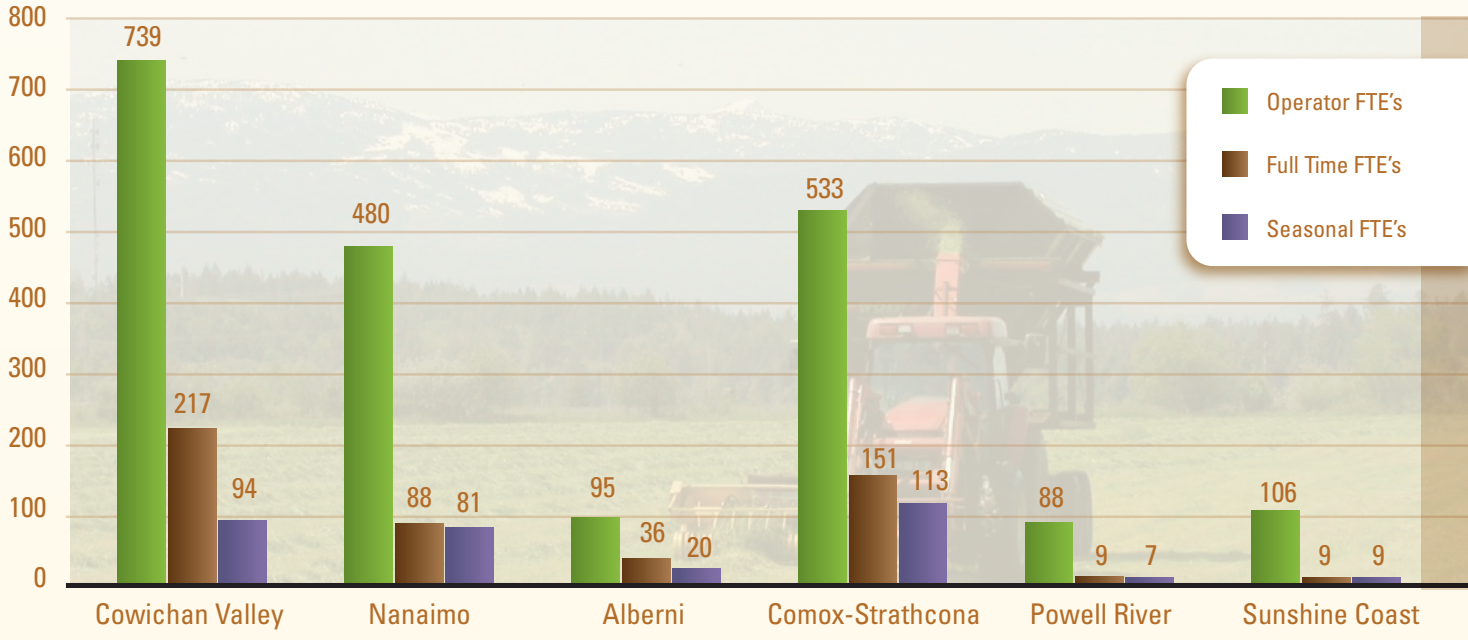

Figure 14: Source of farm employment in Study Area (Source: 2006 Census – weeks of paid labour converted to Full Time Equivalents (FTEs) based on 50 weeks per FTE)

APPENDIX II: METHODOLOGY

This document is essentially based on a review and comparison of the information contained in a variety of agricultural plans and reports completed in the past decade with a statistical analysis of the Census data. The authors of this report were involved in a number of the plans so, to be consistent, the analytical methods used in the previous reports were applied to this study.

- Comox Valley Agricultural Plan (2002)
- North Cowichan Strategic Agricultural Plan (May 2001)
- Cowichan Region Agricultural Plan (October 2009)
- Powell River Economic Development Plan for Agriculture (November 2009)
- Comox Valley Local Agri-food Development Project (2008-9)
- Denman Island Agricultural Strategy (2010)
- Agriculture Resource and Innovation Centre Feasibility Study, Vancouver Island University (2009)
- Comox Fertilizer Supply Feasibility Study (December 2009)
- Campbell River Agricultural Area Plan (draft)
- Alberni Valley Agriculture Plan (draft)
- BC Agricultural Plan "Growing a Healthy Future for BC Families" (2008)
- Focus on the Future: Developing the Agri-food Industry in British Columbia (2006)

The Ministry of Agriculture has a list of agricultural plans in BC:
http://www.agf.gov.bc.ca/resmgmt/sf/aap/Status_of_Ag_Area_Plans_and_Strategies_19_Sept_2011.pdf

Additional interviews, consultation, analysis and area tours were conducted, especially in the areas not covered by these plans, to ensure that the issues, opportunities and themes extended throughout the Study Area.

During the time this Framework was being developed, the Regional District of Nanaimo and the Sunshine Coast did not have regional agriculture plans. Consultants gathered information about these areas from a Nanaimo agricultural labour study, online farm directories, Google Earth and Street View. This information was confirmed through consultations with key people in the industry and a tour of farms on the Sunshine Coast.

In some cases, observations have been added based on the personal and professional experience of the authors who have both been involved in the agriculture industry for many years. An example of this is the categorization of farmers by revenue scale.

The characteristics, issues and opportunities that were common throughout the Vancouver Island Coast region were identified and used to develop the Strategic Directions in this document. Discussions with the Steering Committee and Advisory Committee have also helped to fine tune the overall direction.

Census Data

The data used in this report is primarily from the 2006 Census of Agriculture by Statistics Canada. The information, when compared to figures drawn from prior census reports, demonstrates the data reasonably reflect the state of the agriculture sector today.

Some data gathering protocols have changed since the 2006 Census. The changes create challenges in correlating and comparing some of the data. For example, in 2008, two regional districts were established from the former Comox-Strathcona Regional District. Where possible, the information has been separated for each Regional District.

Definition of Agriculture

For the purposes of this study, agriculture is defined as: *"The art and science of crop and livestock production. In its broadest sense, agriculture comprises the entire range of technologies associated with the production of useful products from plants and animals, including soil cultivation, crop and livestock management, and the activities of processing and marketing."* (Source: McGraw-Hill Encyclopedia of Science and Technology)

This definition is intended to indicate commercial viability and scalability, thus does not include backyard gardens cultivated for personal consumption, small scale livestock production or flower gardens, even though output may be found, in limited quantities, at the farm gate or in-season markets.

A census farm was defined (in 1996) as an agricultural operation that produces at least one of the following products intended for sale: crops, (field crops, tree fruits or nuts, berries or grapes, vegetables, seed); livestock, (cattle, pigs, sheep, horses, exotic animals, etc.) poultry, (hens, chickens, turkeys, exotic birds, etc.); animal products, (milk or cream, eggs, wool, furs, meat) or; other agricultural products (greenhouse or nursery products, Christmas trees, mushrooms, sod, honey and maple syrup products).

Therefore, for the purposes of this report, agriculture does not include production, processing, management and marketing of: aquaculture or mariculture products; non timber forest products; or timber products. Some segments of these activities are an integral part of the growing and processing sectors and may be included in statistics.

APPENDIX III: RESOURCES AND BIBLIOGRAPHY

Resources

- AGRIBUSINESS eBUSINESS agribusinessecampus.com
- BC Agrifoods: A Strategy for Growth www.gov.bc.ca/agri/down/bc_agrifoods_strategy.pdf
- BC Agri-food Knowledge Platform www.kmwpp.ca
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- Canadian Farm Business Management Council www.farmcentre.com
- Certified Crop Advisers www.prairiecca.ca
- Community Futures Development Corp www.communityfutures.ca
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- Food Security www.health.gov.bc.ca/healthyeating/foodsecurity.html
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Vancouver Island
Coast Regional Agriculture

Framework for Action

Island Agricultural Advisory Committee Workshop
Beban Hall at Beban Park, Nanaimo
February 6th, 2013
9:00am to 4:00pm

Draft Agenda

9:00am- Welcoming Address
- Master of Ceremonies

9:30am- AAC Tools for Strengthening Farming, a presentation on AAC mandates and tools for influencing change
- Ministry of Agriculture Staff

10:00am- Innovative AAC Approaches, AAC representatives discuss their AAC's mandate and their successes
- Chaired by Ministry of Agriculture Staff

10:30am- Coffee Break

11:00am- Elected Official Panel, elected officials from various local governments discuss their experiences interacting with AACs
- Chaired by Ministry of Agriculture Staff

12:00- Lunch

1:00pm- AACs and the Agricultural Land Commission, a presentation on how AACs and the ALC can work together to strengthen farming
- ALC Staff

2:00pm- Coffee Break

2:30pm- Agricultural Land Use on the Island, a presentation on the status of Island agricultural land using Ministry of Agriculture data
- Ministry of Agriculture Staff

3:30pm- Lessons Learned, a discussion on the tools attendees will be bringing back to their AACs
- Master of Ceremonies

4:00pm- Closing Address
- Ministry of Agriculture Staff

REGIONAL DISTRICT OF NANAIMO

	Initial	Date
Content (Mgr)	JH	Dec 27/12
Approved (GM)	JH	Dec 27/12
Legal Form (CO)	JH	Dec 27/12
Authority (CAO)	GEH	Dec 27/12

MEMORANDUM

TO:	Jeremy Holm Manager of Current Planning	DATE:	December 21, 2012
FROM:	Greg Keller Senior Planner	FILE:	0360 20 AAC
SUBJECT:	**Revised Regional District of Nanaimo Agricultural Advisory Committee**		

PURPOSE

The purpose of this report is to seek Board approval to revise the Regional District of Nanaimo Agricultural Advisory Committee Terms of Reference in response to direction provided by the Board with regard to an Agricultural Area Plan.

BACKGROUND

The Board approved a Terms of Reference for the Agricultural Advisory Committee (AAC) in July 2008. Since its formation, the AAC has been involved in a number of agricultural issues. Most notably, the AAC played a key role in the recent Agricultural Area Plan process that resulted in the adoption of an AAP for the region.

Recently, staff presented a report to the Board outlining an action plan for the AAP. The Board directed staff to proceed with the following five actions:

1. Include for the Board's consideration an item in the 2013 budget for establishment of an AAP Implementation Steering Committee, including a limited allowance for implementation actions in 2013.
2. Prepare a Terms of Reference for the AAP Implementation Steering Committee for the Board's consideration.
3. Establish the AAP Implementation Steering Committee as per Board approved Terms of Reference.
4. Work with the AAP Implementation Steering Committee to develop a three-year Implementation Work Plan for the Board's consideration.
5. Take action on items on the Implementation Steering Committee Work Plan within the limited initial AAP Implementation budget established for 2013.

Actions 2 and 3 above require the preparation of a Terms of Reference and the establishment of an Implementation Steering Committee.

DISCUSSION

Staff is proposing to amend the AAC Terms of Reference rather than to propose the creation of a new Committee to build on existing momentum and reduce administration. Please refer to Attachment 1 for a proposed amended Terms of Reference. This amendment would refocus the AAC towards AAP implementation as well as additional agricultural issues as determined by the Board.

Staff is proposing that the amended Terms of Reference maintain the existing membership provisions, number of members, and elected representation. This is in keeping with the direction previously provided by the Sustainability Select Committee when the AAC was first established.

The proposed amended Terms of Reference is organized differently than the existing Terms of Reference and takes a more simplified form, which is consistent with other RDN Committee Terms of Reference. Rather than including specific procedural rules of conduct within the Terms of Reference, AAC members will be expected to follow the procedures contain within "Regional District of Nanaimo Board Procedure Bylaw No. 1512, 2006".

ALTERNATIVES

1. That the Board approve the amended Agricultural Advisory Committee Terms of Reference as attached.
2. That the Board not approve the amended Agricultural Advisory Committee Terms of Reference.

FINANCIAL IMPLICATIONS

With the exception of staff time commitments and minor expenses related to administration of the Committee, the proposed amendments to the AAC will have minimal budgetary impact for 2013. The draft 2013 Budget includes $5,000 for implementation of the AAP. An amendment of the existing AAC Terms of Reference, rather than appointing an additional Committee, would result in administrative efficiencies and reduced administrative costs.

Based on Board direction in relation to action 4 of the AAP action plan, one of the first tasks the AAC will undertake is to prepare a draft AAP implementation work plan for the Board's consideration. Any substantial budgetary commitments can be considered by the Board through approval of the AAC's work plan and would require further Board approval through the annual budget review process.

STRATEGIC PLAN IMPLICATIONS

Given the support for agriculture and local food production in the Board's 2013 – 2015 Strategic Plan's Specific Goals and Actions, as well as in the Regional Growth Strategy, and the various Official Community Plans throughout the region, it is well established that agriculture and food security is a high priority. In addition, the AAP provides greater focus and clarity on agriculture planning at both the local and regional level. The proposed amended AAC Terms of Reference supports the implementation of the AAP, which would assist the region in making a positive contribution towards increasing agricultural capacity and food self-reliance.

The revised Terms of Reference and new role of the AAC would support the Board's mission to implement its plans with action on the ground as outlined in the Board's 2013-2015 Strategic Plan. The implementation of the AAP, starting with a revision to the AAC Terms of Reference, would support the Board's strategic priorities of regional self-sufficiency and economic viability through continued support for local agriculture and shellfish aquaculture.

SUMMARY/CONCLUSIONS

An amendment to the AAC Terms of Reference is being proposed in response to the Board's direction regarding the AAP action plan. The proposed amended Terms of Reference is intended to reflect a need to refocus the AAC's role towards AAP implementation. The proposed membership remains the same while the content of the proposed amended Terms of Reference has been reorganized and simplified to create consistency with other RDN Committee Terms of Reference documents. Approval of the proposed amendment would redirect the AAC's efforts towards implementation of the AAP which is supported by the Board's Strategic Plan. Therefore, staff recommend that the Board approve the amended AAC Terms of Reference attached as Attachment 1.

RECOMMENDATION

That the Board approve the amended Agricultural Advisory Committee Terms of Reference attached as Attachment 1.

Report Writer

A/General Manager Concurrence

Manager Concurrence

A/CAO Concurrence

Attachment 1
Proposed Amended Terms of Reference

REGIONAL DISTRICT OF NANAIMO

AGRICULTURAL ADVISORY COMMITTEE
TERMS OF REFERENCE
date of adoption

BACKGROUND

The Regional District of Nanaimo (RDN) established an Agricultural Advisory Committee in 2008 to assist in a range of RDN initiatives, such as the preparation of an Agricultural Area Plan (AAP) and provide comments and recommendations to the Board on a range of agricultural issues. The RDN adopted the AAP on October 23, 2012. The AAP includes recommendations for action in support of local agriculture and aquaculture in the RDN.

One of the recommended actions included in the AAP is to establish a Committee to guide the implementation of the AAP and provide the Regional Board with ongoing advice and recommendations on agricultural related items. These Terms of Reference expand the role of the AAC to include reference to the preparation and implementation of the AAP.

PURPOSE

The role of the AAC is to increase awareness of agricultural issues in the RDN, assist in the implementation of the RDN AAP and other agricultural related initiatives, and provide local perspective and expertise to advise the Regional Board on a range of agricultural issues on an ongoing and as needed basis as directed by the Board.

ROLES AND RESPONSIBILITIES

The AAC will, upon the Regional Board's direction, be responsible for advising the Regional Board on a number of initiatives including:

- monitoring and evaluating the AAP and its implementation;
- preparing regular reports to the Board with RDN staff assistance;
- providing comments and recommendations to the RDN Board as it relates to agriculture on items including, but not limited to, the Regional Growth Strategy (RGS), Official Community Plans (OCP), Local Area Plans, reviews of RDN Zoning Bylaws, Parks and Trails Master Plans, Drinking Water and Watershed Protection Plans, Liquid Waste Management Plans, Rainwater Management Plans, noxious weed/insect control, and other items referred to the AAC by the Board upon request or as directed by Board policy;

- promoting public awareness of agriculture and its role and economic value in the community; and,
- advocating on behalf of the agricultural community.

MEMBERSHIP

The AAC will consist of a maximum of ten members appointed by the Regional Board representing a diverse range of interests including elected officials, commodity groups/producers, and established regional farming and aquaculture organizations. AAC members should reside, own property, or conduct business within the RDN.

Membership representation will be as follows:

Community Members

- Two members who actively participate in agriculture in District 68;
- Two members who actively participate in agriculture in District 69;
- Two members representing regional agricultural organizations;
- One member representing shellfish aquaculture organizations;

Elected Members

- One Electoral Area Director from District 68;
- One Electoral Area Director from District 69; and
- One Municipal Director.

Community members will be appointed by the Regional Board through an open application process. Members will be recruited through advertisements in local media, word of mouth, and use of the RDN website. In addition, direct invitations may be used to solicit participation by the specific interests listed above. Applications must demonstrate the applicant's interest in agriculture and ability to commit the necessary time to the AAC.

The Regional Board will appoint two Electoral Area Directors and one Municipal Director as outlined above. The Board will designate one of the three Board representatives as the Chairperson for the AAC.

Non-Voting Advisors

The AAC may seek representatives from other organizations to advise the AAC from time to time on an as needed basis to provide expertise in response to the needs of the AAC.

TERM

The term of appointment for AAC members is two years. In order to allow staggering of Committee membership and allow for greater continuity for the AAC and its works, approximately half of the Community member terms will expire each year.

No substitute members will be permitted. If a member must resign from the Committee, their position will be filled through the application process.

No remuneration for participation on the Committee is provided unless otherwise approved by the Board. However, if Committee activities coincide with meal times, meals may be provided.

Conflict of Interest

AAC members having a priority or pecuniary interest in a matter discussed by or are personally affected by a matter discussed by the AAC must declare a conflict and step aside from the discussion and subsequent vote/motion on that particular matter.

1. Terms of Reference originally adopted by the Board on August 26, 2008
2. Terms of Reference amended by the Board on January 25, 2011
3. Terms of Reference amended by the Board on January 22, 2012

The

Urban Farming Guidebook

Planning for the Business of Growing Food in BC's Towns & Cities

2013

Foreword

About three years ago, working as Land Use Manager in the City of Campbell River, I responded to a resident who was wanting to know if she would be able to legally grow vegetables on her acre lot and sell them. After consulting with the Zoning Bylaw, I was embarrassed to advise her that this was not a legal use under current zoning. Seeing the folly of that bylaw provision, we quickly set out to change the bylaw to enable this sensible and sustainable use of that and other similar residential properties. However, the question has to be asked: how did we find ourselves in that position to begin with?

Consider the role of agriculture in human settlement history. The domestication of plants and animals enabled humans to transition from being nomadic hunter gatherers to developing urban civilizations some 10,000 years ago during the Neolithic era. Growing food was the key foundational system for permanent settlements and remained that way for ten millennia. Then we took an unfortunate turn during our flight from the industrialized city. Ironically, this occurred around the time Ebenezer Howard presented the Garden City movement to the western world. The Garden City model embraced food production and its systems as key elements of community design. However, the race to the single use zoned suburbs did not include food production as part of the design of suburbs and in many cases, including the City of Campbell River, urban farming was excluded from our lists of permitted uses and such farming became non-conforming or simply illegal uses which, if they were lucky, avoided bylaw attention. Peri-urban areas became urban reserves with uses, including farming, that were deemed temporary awaiting some higher calling.

So what has changed? Several converging, relatively contemporaneous events and movements have brought us back to recognize and re-embrace food production as an integral and vital part of the urban complex. These include the Bruntland Commission, Local Agenda 21, energy shortages and pricing increases, social movements which demand healthier local and organic foods and associated social justice concerns around food security, climate change and initiatives to mitigate its projected impacts, and evidence of the significance of recent food supply shocks. In addition, there is considerable concern about the environmental, social and economic impacts resulting from our industrialized, global food production system and this has driven many alternative food production initiatives which are characteristically local.

The Urban Farming Guidebook, like *Agricultural Urbanism* (de la Salle, Holland 2010) is a timely and important resource for local government staff to move this critical element of sustainable urban design and living forward. We have a lot of ground to (re)cover. Having a resource like this Guidebook to assist our efforts is a welcome and important step in this journey.

- Rob Buchan CAO, District of North Saanich

EcoDesign Resource Society

EcoDesign Resource Society (EDRS) has published the Urban Farming Guidebook to support local governments and communities in finding innovative and creative strategies for sustainability and resiliency. EDRS has a long history of supporting areas of planning and design that are at the pioneering edge of sustainability. We provide leadership and resources to special projects that fit within our mandate noted above. Specifically, for this project EDRS has established a working relationship with HB Lanarc - Golder who has an award-winning food and agriculture planning practice and brings unique expertise in the field of food system planning. To find out more about EDRS please visit: http://www.vcn.bc.ca/edrs

Acknowledgements

A large group of people and organizations contributed to the development of the Guidebook. Specifically, EDRS wishes to thank the Real Estate Foundation of BC whose leadership in sustainability and land use planning enables non profits, local governments, and the private sector to partner in developing community resources, facilities, and programs. The Real Estate Foundation of BC has been at the forefront of identifying and funding initiatives to further understand and develop tools for sustainable food systems. As the primary funder of the Urban Farming Guidebook, the Real Estate Foundation has again demonstrated its commitment to transforming land use attitudes and practices through innovation, stewardship, and learning.

We also wish to thank our municipal and academic project partners which all contributed cash and in-kind resources to the Guidebook. The City of North Vancouver, City of Vancouver, City of Campbell River and City of Kelowna helped to make the Guidebook possible through their curiosity and willingness to explore and provide insight in the area of growing food as a business within town boundaries. Kwantlen Polytechnic University, Institute for Sustainable Horticulture, contributed research findings around the economics of urban farming.

Thanks to our peer reviewers Rob Buchan, CAO, District of North Saanich, Heather Johnstone, Edible Garden Project, and Chris Thoreau, Local Food Pedalers, who lent their on-the-ground insight from leading successful projects and initiatives in the planning and farming fields.

real estate foundation BRITISH COLUMBIA

ECODESIGN RESOURCE SOCIETY

HB LANARC PLANNING DESIGN SUSTAINABILITY A Member of the Golder Group of Companies

Workshop participants generously volunteered their time to bring the concepts behind urban farming to life by sharing their experiences and aspirations for urban farming. Specifically, urban farmers and related businesses provided key insights to the successes and limitations of urban farming in BC. As community leaders, urban farmers are increasingly becoming a key community asset and are pushing the boundaries of what is possible for local food and farming.

CAMPBELL RIVER

Mary Begg – Backyard gardener

Ross Blackwell – Manager, Land Use Services, City of Campbell River

Kira De Sorcy –Educator, Farmer, Blue Jay Lake Farm

Chelsea Holley – Urban Farmer

Morgan Ostler – Garden Columnist, Chair of Campbell River Agricultural Plan

Barbara Phipps – Greenways Land Trust, Small scale chicken producer

Hans Rhenisch – Farmer and plant physiologist

Michelle White – Farmer, Ross Mountain Farm

Amber Zirnhelt – Sustainability Manager, City of Campbell River

CITY OF NORTH VANCOUVER

Margaret Broughton – Vancouver Health Authority

Kevin Connery – EcoUrbia

Mike Hunter – Manager, Environment and Parks, City of North Vancouver

Heather Johnstone – Edible Garden Project/ Loutet Farm

Alex Kurnicki, Streetscape Planner, City of North Vancouver

Karen Morton – Eco Urbia

Christina Rucci – District of North Vancouver

KELOWNA

Jon Alcock, Farmer, Sunshine Farms

Deepa Filatow, Provincial Bioterrain Specialist and Urban Farmer

Bob McCoubrey , Former organic farmer

Lisa McIntosh, Urban Harvest Home Delivery

Greg Sauer, Environment and Land Use Planner, City of Kelowna

Curtis Stone, Urban Farmer, Green City Acres

VANCOUVER

Wendy Mendes, Food Policy, City of Vancouver

Chris Thoreau, Farmer, Local Food Pedalers

Wes Regan, Executive Director, Hastings Crossing Business Association

Vancouver Urban Farmers

Vancouver Urban Farming Forum Participants

LEAD AUTHORS

HB Lanarc - Golder

For more information about the Guidebook, please contact Janine de la Salle: janine_delasalle@golder.com or Joanna Clark: joanna_clark@golder.com

Table of Contents

1. GROWTH OF A MOVEMENT

The Urban Farming Guidebook is written to help planners, engineers, and administrators from small and large communities to gain a better understanding of the potential, pitfalls, and best practices for growing, potentially raising, and selling food within town boundaries. Strategies and approaches outlined in this Guidebook provide local governments with tools to proactivley plan for urban farming. This resource has been developed in collaboration and consultation with urban farmers, municipal staff, academics, and advocates.

Urban agriculture is becoming a household word for many municipalities and most often brings to mind community gardens or edible landscapes. **Urban farming**, however, refers to growing food in the city to generate revenue. This involves farmers finding space in the city - backyards, vacant lots, parking lots, rooftops, parks, private or public spaces to grow food for wholesale and retail sales to urban consumers. This revenue-generating aspect of urban farming creates a whole new set of challenges and opportunities for the farmers themselves and for local governments. It is these unique challenges and opportunities of urban farming that this Guidebook addresses.

Throughout the Guidebook, examples and best practices are drawn from a range of communities, as urban farming looks very different in larger metropolitan areas, such as Vancouver, than it does in smaller more resource focused communities such as Campbell River. Despite the major differences between communities, there are overall principles and approaches that are relevant for any community. These are presented in terms of policies, incentives, and examples for towns and cities to proactivley plan for small-scale commercial agricultural activities.

Urban Farming: *The growing, cultivating and distributing of food within a city or town boundary to generate revenue.*

The term **"urban"** is used here to define the regulatory boundaries of a municipality and is not intended to imply a particular degree of building density. It is likely that some farmers who are currently producing food within town boundaries may not self-identify as "urban farmers". However, for simplicity's sake they are included in the Guidebook's definition. The term urban farmers and other language in the Guidebook are working definitions and will continue to evolve as the practice of urban farming expands.

The term **"food system"** includes food production, processing, distribution, marketing, consumption, and food waste. Like water, energy and waste, the food system plays a fundamental role in urban systems and many North American cities and towns are beginning to find ways to make their current food systems (where their food comes from, how it is grown and distributed, how its consumed, and how food waste is recovered) more sustainable. This includes decreasing the distance that food travels, preserving local farmland, increasing food security and awareness about healthy food, and providing facilities for organic waste recovery.

Figure 1: The dimensions of the food system from land to waste.

Inner City Farms, Vancouver BC


SOLEfood Farm, Vancouver BC

2. CHARACTERISTICS OF URBAN FARMING

In North America, farming in cities has always existed. In fact, many cities have evolved from agrarian roots, settling on the agricultural lands that are most productive. However, urban farming has dramatically diminished in scale and legal status during the past 100 years, with the exception of the important role victory gardens played during WW II, when a significant quantity of food was grown by citizens for the war effort. With increasing urbanization, the decline of the urban and near-urban farm has become a familiar story. Industrialization of the food system coupled with efficient long distance transportation has allowed cities to import most of their food and decreased their reliance on local farms. As a result, remaining farms often disappear due to development pressure or municipal regulations that restrict farming activities. As rural farms face a similar decline due to urbanization and industrialization, communities are faced with losing their local food sources.

Recently there has been an emergence of a new type of farm found within the city limits. These farms and farmers come with a unique set of characteristics as outlined below.

The nouveau farmer: Over the past 10-15 years, the nouveau farmer has emerged, willing to revive remnant urban farms or find space within the confines of the built environment, to produce and sell food. Some of these farmers are choosing this route simply because they can't access rural farms due to high land prices or lack of available land. Many are entrepreneurs, sometimes part of collectives, who are utilizing innovative growing methods to produce high yields in the small spaces they can find in the city. Unlike farmers of the past, these new farmers do not necessarily come from agricultural backgrounds. A study of Vancouver farmers found that only 35% of operators had experience growing up on a farm or more than five years farming experience (Schutzbank, 2011). In BC, there appears to be two new farming cohorts: i) early retirees with start-up capital who are moving out of large cities into more rural communities, and ii) university educated young people often with very little start-up capital.

Diverse urban farming business models: Urban farmers and their businesses can vary greatly in both experience and approach. Urban farming businesses tend to be either a social enterprise or a for profit business model. Social enterprises often have mandates that address food security, local food and community development, and the revenue from these farms goes back into the operation. For profit farms are often started by entrepreneurs with similar mandates to social enterprises, but work under a conventional for profit model, where revenues go back to the farmer and operation.

Alignment with other organizations and businesses: Being in the city, urban farms are often high profile and can have great potential for collaboration within the community by building partnerships with developers, the food service industry, schools, community organizations, and local governments. Some are also becoming educational hubs for growing and eating healthy food. As a new practice, standards, techniques, and business operations are still being fine-tuned; however, they are proving to be successful enough to attract a market in local food retail and foodies alike. They can also align with many of the food system, green economy, and community development strategies being adopted by local governments.

Green City Acres is a for profit urban farm business in Kelowna BC, that uses intensive production methods on residential yards. Produce is distributed by bike to local restaurants, grocers, farmer's markets and through a CSA program. This farm has reported sales of $40 - $50,000/year.

- Curtis Stone, 2012
greencityacres.com

Fresh Roots Urban Farm is a non-profit society with a number of urban farm sites in Metro Vancouver. They sell through CSA programs, to farmer's markets, restaurants and school cafeterias. They have also partnered with community organizations and schools to use their gardens for workshops, classes, farmer training programs and for community celebrations.

- Fresh Roots Urban Farm, 2012
freshrootsurbancsa.wordpress.com

Nature of urban farm practices: Urban farming can be considered part of the spectrum of agricultural geography. Urban sites are micro-scaled with growing space that is typically less than one acre and within close proximity to urban activity. Commercial and residential neighbours are closer to urban farms and farming operations can be impeded by concern for public health, safety, and aesthetics, among others. Equipment tends to be limited to hand tools with the rare exception of a rototiller or tractor. Facilities are usually limited to small greenhouses and tool sheds, rarely large barns. Mixed produce is a typical crop while chickens or bees can be included only if bylaws permit. Food is distributed straight to the source whether it is at a farmer's market, through food deliveries, or directly to grocers and restaurants. Overall yields are smaller but yields per unit area can be higher than traditional rural farming.

Your Local Food Pedalers is located on an industrial site in Vancouver, BC, grows micro greens in flats on raised benches. The operation is highly productive, takes up a small portion of land, and can be transported to another site if needed. Local Food Pedalers, 2012 - myurbanfarm.com

Centralized market and resources in an urban environment: In a city, urban farmers are closer to their market, to other farmers, and to supportive organizations which allows them to share training and resources, and to collaborate with others to reach wider audiences. There also tends to be a larger population of foodies, supportive restaurants, and grocers that create a demand for urban farming products.

Currently, and for the foreseeable future, urban farming is and will continue to be a small but potent dimension of local food systems. Small due to the size of the emerging industry, but potent due to the many other opportunities urban farming can help develop. One of the most direct benefits of growing food in or near towns and cities is the new source of products and people that adds value to local communities.

Verticrop (left) is a technology that utilizes suspended hydroponic tray systems on a conveyer system to grow leafy greens. This system is being built on the top of a parking garage roof in downtown Vancouver under the name of Local Garden. (www.localgarden.com)

3. WHY URBAN FARMING MATTERS

Urban farming has emerged at the frontier of a burgeoning trend in local food and community resiliency. Local food retailers, restaurants, and consumers are responding as partnerships with chefs and even mainstream grocers are being established. Vegetables farmed in the city are finding their way onto menus, food carts, and produce stands. As a result, linkages in the local food chain are becoming stronger in concert with a growing consumer demand for local and sustainably grown food. Although it is not expected that these farms will ever feed a whole city, they have great potential for increasing community health through providing secure access to fresh food in the face of rising food prices, as well as stimulating community wealth with new sources of jobs and entrepreneurial opportunities .

The urban farming trend is not being ignored by local governments as many municipalities are starting to incorporate policy for more local food systems into their planning processes. Support for initiatives associated with food systems is showing up in Official Community Plans, Agriculture Plans, park and neighbourhood designs, and food strategies.

At the same time, with this rapidly growing interest, many local governments are struggling with how this fits into their land use polices, regulatory systems, and scope of operations, especially in the context of land being re purposed for growing food. Urban farmers are also looking for ways to eliminate barriers to the practice of farming in the city. The emerging need and opportunity around urban farming is to integrate these activities in a safe and beneficial way.

The Benefits of Urban Farming

The businesses that comprise the emerging urban farming sector provide a number of benefits to the community. Food is often grown using low chemical inputs; fresh food products are distributed and directly marketed to food retailers, farmer's markets, restaurants, and others often using alternative or low carbon delivery methods. Farms can be a conduit for waste recovery, providing supply for the demand for organic composted soil. Also, the presence of the farm is often highly visible to the public, raising awareness about food and farming, and often providing opportunities for education about growing and eating fresh produce. Finally, urban farms provide a training ground for young farmers who are interested in the farming process. These new farmers are a much needed resource to replace retiring farmers. Specific areas of local government interest and linkages to urban farming are discussed below.

Green Jobs and Innovation

Urban farms foster entrepreneurs and provide a conduit for innovation. Urban farmers with small growing spaces are coming up with innovative ideas for how to produce high yields and a reasonable return. Models such as aquaponics, vertical farming, micro-green operations and greenhouses on rooftops are all innovations that are emerging in North American urban farms. Although they are just starting out, many of these innovations are getting media coverage and buy-in from local businesses and consumers, helping to put urban farming on the map. Jobs in urban farming are being created and job training in urban contexts is preparing would-be farmers to scale up and move onto larger farms.

Urban farms can be set up as a social enterprise to generate revenue and create jobs for local low income communities. For example, SOLEfood, a Vancouver urban farm, was started as an initiative to provide employment and training opportunities for Vancouver's inner-city residents. In 2012, they employed 25 staff from their sales revenues (Dory, 2012).

Waste Reduction

In BC, food waste makes up 40% of residential waste and organics, and made up a quarter of the overall waste stream in 2006 (Ministry of Environment, 2010). This category is comprised primarily of compostable items such as food and yard waste. Urban farms have the potential to redirect food waste into compost for food production. Reusing organics for farming is a form of energy recovery and given that more hydrocarbon energy is used to produce food energy, this is an important part of making agriculture more sustainable. Urban farms can also provide composting education to the public to encourage food waste reduction. With heavy foods, such as water-rich produce, reducing the travel distance to the point of purchase reduces greenhouse gas emissions and allows for more transportation alternatives such as cycling. In 2011, Loutet Farm diverted waste from City of North Vancouver parks (16

truck loads) into on site compost (City of North Vancouver Parks and Environment Advisory Committee, 2012).

Urban Revitalization

Many urban farms are located in under-utilized urban spaces such as vacant lots or under-used parks. What was once a derelict space can become a lush green space and hub of activity for the community and urban farmers. Green City Acres, an urban farm in downtown Kelowna, has one site located on what was once a derelict vacant lot overlooked by surrounding condominiums. Since the farm was established , the farmer has been receiving accolades from many of the condominium owners for beautifying and activating the space (Stone, 2012).

The Urban Digs Farm site on ALR land in South Burnaby was once overgrown and inhabited by squatters. This farm now contributes to 3 acres of farmland located throughout metro Vancouver where they raise pigs, chickens and a range of fresh produce sold locally.

- Urban Digs urbandigsfarm.com

Community education and development

A 2007 study of producers showed that urban agriculture groups tend to play a role in social cohesion, education, and advocacy for specific causes or policy changes (Santanderau & Castro, 2007). Farms in the city can become urban features that inspire awareness and conversations about food, whether supportive or controversial. Many farmers will attest to the streams of local and out of town visitors who come to see their farms in action.

Urban farms can also become community hubs that celebrate and raise awareness about local food. Events such as festivals, harvest dinners, cooking, or growing demonstrations, and educational programs can inspire DIY activities involving growing your own food, making cheese, beekeeping, cooking and preparing food. Some programs cater to certain groups such as ethnic groups, low income families, seniors, and children. Urban farmers often host public events that involve other organizations or industry sectors including local chefs and food and farm organizations. Many farmers are also asked to speak about local farming or teach growing techniques. Some urban farmers are also technically savvy with websites, blogs, Twitter and Facebook accounts dedicated to promoting their farm and educating the virtual world about local food

Event poster by Mason Street City Farm, located in Victoria, BC. A farm that focuses on educating people about growing food and increasing food security on Vancouver Island. masonstreetfarm.com

The associated benefits of urban farms extend to many facets of the health and wealth of a city. These can include education and training about eating and growing local food, increased awareness about where food comes from, and training for farmers, all of which are in great need as older generations of farmers continue to retire and urbanization continues to rise.

The Orchard Garden, University of British Columbia

4. UNLEASHING THE POTENTIAL OF URBAN FARMING

Farming in urban spaces can pose a number of unique challenges for both regulators and farmers. For example, in many towns and cities, agriculture is not a permitted use outside of the Agricultural Land Reserve or on agriculturally zoned lands. To an extent this makes sense as agricultural and urban land uses have historically been separated to avoid conflicts between differing land uses. However, modern urban farms tend to be smaller scale and focused on higher value crops and low-impact growing techniques, thereby avoiding some of the historical problems of integrating agriculture where people live, work, learn, and play.

This section will describe and discuss these challenges based on the key dimensions or processes of the urban farming practice from both regulatory and urban farming standpoints, as well as provide examples of local government responses to these challenges.

Dimensions of urban farming include:

Land and Land Access

Production

Processing and Distribution

Celebration and Education

Waste Recovery

Key policy, land use, and administrative barriers for urban farmers:

- A lack of policy and regulations addressing urban farming in statutory plans (such as OCPs) and zoning bylaws
- Possible noise, dust, traffic, pesticide use, and odour associated with farming activities
- An increase in real or perceived risks to health and safety
- A lack of appreciation of the regulatory and farming realities
- A lack of licensing specific to the nature and operations of farming businesses
- Restrictions on the selling of produce from farm sites
- Restrictions on keeping small livestock and farm animals (e.g., chickens and bees)
- Restrictions on farm structures such as greenhouses and storage sheds

Land & Land Access

Urban farming can happen almost anywhere a farmer can find and secure land. In BC, urban farms are found in residential yards, brownfields, industrial zones, parking lots, vacant lots, boulevards, city parks, rooftops, as well as on lands formally designated or zoned for agriculture. Urban farming can occur in three distinct land use categories, each with its own set of challenges:

1. **Agricultural land reserve (ALR) -** Land in the ALR is designated and regulated under Provincial legislation as well as local bylaws (Government of BC, 2011). Farming activities that occur in the ALR are also protected by other legislation such as the Right to Farm Act (Ministry of Agriculture, 2012). This protects farms from nuisance complaints and local government bylaws that may impede farming practices.
2. **Agriculturally zoned land -** This is land that is deemed as potential agricultural land but is not included in the ALR. Many municipalities in BC have both ALR and non-ALR agriculturally-zoned land within or adjacent to their city boundaries. Farming outside of the ALR is less protected by the legislation noted above and is determined by local governments. This makes urban farmers who are operating on non-ALR lands more vulnerable to complaints and municipal restrictions. However, due to the intensive and multi-functional nature of many urban farms, not being in the ALR can be a positive due to reduced restrictions on permitted uses. As a result, urban farmers may be able to include a wider range of uses (e.g., small restaurants) on their farms that are not permitted on ALR lands.
3. **Non-agricultural land -** Farms on land that is not formally designated for agriculture as a primary use (e.g., lands zoned residential, park, commercial, industrial, and institutional) are regulated primarily by local governments. These farms, often integrated with or adjacent to other uses, can be found almost anywhere in a community - vacant lots, residential yards, rural residential lots, parking lots, rooftops, boulevards, and institutional open space. The zoning of these lands may or may not permit urban agriculture as an allowed activity.

Farmland at the urban edge

Urban farms on ALR land deserve careful attention and support; however, urban farming tends to occur on agriculturally-zoned land within town boundaries, or on non-agricultural land where tools are not necessarily in place to support farming as a business.

Lufa Farms, commercial greenhouse on industrial warehouse, Montreal, QC.

Land Access

Land for urban farms can be secured either through a formal purchase or lease agreement, or informally, through a verbal agreement, perhaps in exchange for a portion of the harvest or a percentage of sales. Urban farmers may farm their own yards and/or establish agreements to utilize lands owned by other people.

Securing private commercial land may also occur under a contract agreement or lease with the land owner (often a developer or land manager). City Farm Boy, an urban farming business in Vancouver, has an agreement with a residential apartment building to grow food for sale on their rooftop (Carrot City, 2012). A vacant site may or may not require a temporary contract with a developer who is not ready to build on the land.

Public land, depending on the type and applicable regulations, generally requires some sort of agreement with the local government and the process may need to engage the community. Under-utilized municipally-owned land like vacant spaces or boulevards may simply require a lease agreement or contract. Public parks may require a more rigorous process including public engagement to determine if there is community support for the concept.

City Farm Boy, rooftop farm, Vancouver BC

Challenges & Considerations for Land Access

There are two key challenges for securing land for urban farms: 1) access to land, and 2) policy and regulatory barriers preventing farm uses in non-agricultural zones.

Access: Land access can be one of the biggest challenges for urban farmers due to high land prices for purchase or lease, lack of suitable space for farming, and potential prohibition of farming activities may in some zones. Also, there may be no formal leasing structure for available land. With farmers investing in soil inputs and production, long-term stability of a site is essential for ongoing success.

Policy, Regulation & Political Support: Urban farming activities on non-agricultural lands are often limited by lack of support for urban farming or policy and regulation that may or may not apply to urban farmers.

Local Government Responses

Access to land:

Lease agreements for public land: In the case of public land, municipalities may have an agreement with an urban farmer for park use or farming on publicly owned vacant land.

- The City of North Vancouver allows The North Shore Neighbourhood House Edible Garden Project, a local non-profit organization, to operate the Loutet Farm in Loutet Park. The Loutet Park Farm license is for five years with an offer to renew for two additional consecutive five year terms. The license includes terms and conditions addressing maintenance, farm buildings, contaminants, and other issues related to farm operations (City of North Vancouver, 2012).
- The City of Baltimore issued a Request for Qualifications to farm city-owned vacant land. Those applicants deemed qualified will be able to lease city property for up to five years with an option to renew. The city expects to lease 35 acres of land in parcels one acre and larger (Baltimore Office of Sustainability, 2011).
- Incubator farms are partnerships between municipalities, non-profit organizations, communities, and educational institutions. This collaboration supports new farm businesses by providing land, education, technical support, and funding. For example, in Richmond, an incubator farm has been established through a partnership between the municipality, Richmond Food Security Society, and Kwantlen Polytechnic University's Richmond Farm School (Dorward, Schutzbank, & Mullinix, 2012).

Incentives for private land owners: In BC, a developer can receive a lower tax designation if they allow a temporary use in the form of park space, or food production. This can be controversial because private landowners receive economic incentives from taxpayers for keeping their land undeveloped. However, it can encourage developers to consider allowing urban farms and community gardens to operate, even temporarily, on their land.

- In Vancouver, some developers have received property tax breaks by allowing community gardens or urban farms on their vacant land. This allows them to temporarily change their land designation from business or commercial to recreational or non-profit which lowers the tax rate significantly. Concord Pacific in Vancouver is currently leasing a two acre site to SOLEfood Farm and is transferring their tax savings to a foundation that supports projects like urban farms (Globe and Mail, 2012).

Policy and Regulations:

Official Community Plans (OCPs) are plans developed by municipalities, which include public policy around key issues such as land use, transportation, housing and utilities. Communities with policy supporting local food systems, local food and/or local agriculture, are likely to also have an interest in urban farming. Stating support for this type of activity in an Official Community Plan provides a policy basis to ensure that municipal actions for urban farming are supported and encouraged within the organization.

- The City of Victoria officially recognized Food Systems in Chapter 17 of its 2012 Official Community Plan. Of specific interest to this Guidebook are the directions and policies for food production on private land (City of Victoria, 2012):
    - » 17.14 Explore expanded small-scale commercial urban agriculture through a review of policy and regulations to consider the opportunities for, and implications of:
        - » 17.14.1 Enabling infrastructure and human resources needed to support small-scale commercial urban agriculture as a home occupation;
        - » 17.14.2 Using residential accessory buildings for commercial agricultural purposes; and,
        - » 17.14.3 Allowing commercial urban agriculture uses, including greenhouses, in commercial and industrial zones.

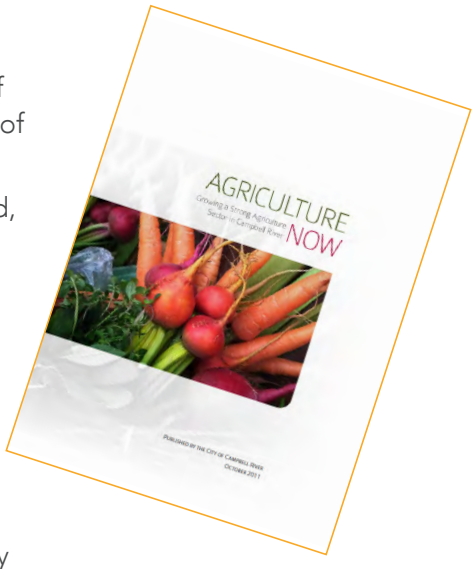
Zoning: Zoning is a planning tool that permits and restricts certain land uses and activities for a parcel or area of land within the municipality. Zoning also regulates the characteristics of buildings within those areas (e.g., building height, lot coverage, setbacks, etc.). Zoning designations include uses such as residential, commercial, industrial, institutional, and agricultural. Uses can be primary or principal (the main use) or accessory (secondary use). In most urban zones, agriculture is not a permitted use even as a secondary use. This means urban farmers are not legitimately allowed to operate in these zones and, if neighbours complain, the municipality may enforce the zoning bylaw. To support more people growing food in the city, some municipalities have started to allowed agriculture within some or all zones. Examples include:

- The City of Kelowna allows urban agriculture as a "Principal Use" in all of the single and two family dwelling zones, public, and institutional zones, and a "Secondary Use" in the multi-family, commercial, and industrial zones (City of Kelowna, 2009).
- The City of Seattle, WA Ordinance 123378 allows urban agriculture in all residential zones (City of Seattle, 2010).
- The City of San Francisco, CA Ordinance 66-11 allows urban agriculture (including sales) in residential districts, neighbourhood commercial districts, and other districts, with limitations but not complete prohibitions on, compost area placement, fencing, mechanized equipment use, site upkeep, sales, drop-offs, and pick-ups (City of San Francisco, 2011).

Agricultural Plans: Agricultural Plans help municipalities identify agricultural assets and strategies to protect, enhance, and/or improve their existing agricultural land and economy. Municipalities that adopt agricultural plans often include support for urban agriculture and urban farming initiatives within city boundaries.

- In 2011, The District of North Saanich developed a Whole Community Agriculture Strategy with the view that local communities are part of a food-shed supported by an integrated and diverse local food system. This strategy states that a complete community is a place to live, work, play, and grow food. The top five priority actions for the strategy include the following (District of North Saanich, 2011):
    1. Ensure municipal bylaws support agriculture
    2. Create an agricultural webpage (on the municipal website)
    3. Represent local and regional interests in food/agriculture
    4. Undertake an agricultural economic development plan
    5. Support independent local agricultural organizations.

- In 2011, the City of Campbell River created an Agriculture Plan to help implement their goal to produce 10% of their own food by 2031. Some of the primary objectives of the plan included (City of Campbell River, 2012) :
  - » Developing resource capacity including land, labour, and infrastructure
  - » Increasing the economies of scale of agriculture
  - » Improving access to markets
  - » Encouraging young farmers and attracting new farmers
  - » Integrating agriculture within the community
  - » Reinforcing relationships with regional agriculture in the Comox Valley



Campbell River Agriculture Plan, sustainablecampbellriver.ca, 2011

Food Strategies and Policy Councils: Toronto, Edmonton, New York City, Seattle (and soon Vancouver), have all adopted city-wide food strategies to support actions toward implementing more sustainable food systems. A common theme involves strengthening the local food economy by supporting local food businesses and urban agriculture. Many cities have formed food policy councils to represent various groups involved in the food system. Rural and urban farmers often sit on these councils.

Urban Farming Land Types

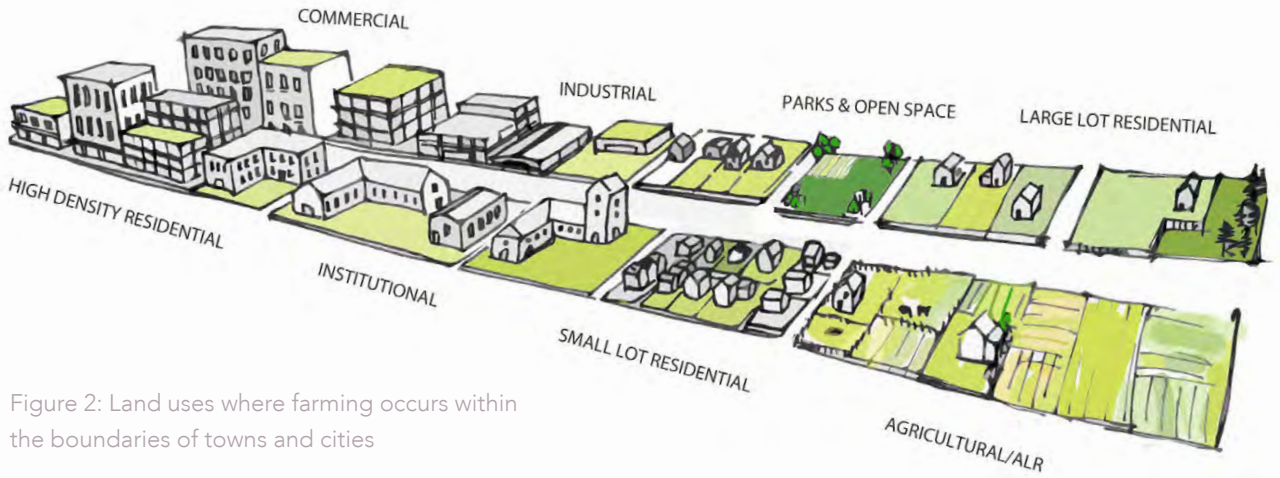


Figure 2: Land uses where farming occurs within the boundaries of towns and cities

This following are examples of urban farming land typologies:

Urban Acres, Nelson BC

Residential Yard

Description: One or more residential lots are used. Tenure can depend on ownership commitment, house sales, and community buy-in. The space is often leased in exchange for produce or a percent of the food sales.

Owner: Homeowner/renter

SOLEfood Farms, Vancouver BC

Urban Spaces (parking lots and rooftops)

Description: Lots owned by a private owner that are vacant due to land holding or soil remediation. These farms are often temporary and raised beds are typical for production.

Owner: Developer, local business

Loutet Farm, North Vancouver, BC

Parks and Public Greenspaces

Description: A portion of a public park is transformed into an urban farm.

Owner: Local government. The farm may be run by a local organization that is overseeing the management and operations of the farm to ensure they meet the requirements of the City.

UBC Farm, University of British Columbia, Vancouver, BC

Institutional Land

Description of Farm: Spaces on hospital grounds, universities, or other institutions.

Owner: Institution

Local Food Pedalers, Vancouver, BC (Located on a vacant lot in an industrial area)

Vacant Lot/Under-Utilized Site

Description: Lots that are vacant due to land holding, under-utilization or soil remediation. Could be found in commercial or industrial zones. These farms are often temporary and raised beds are typical for production.

Owner: Developer, local business or municipality

Richmond Sharing Farm, Richmond, BC.

Agriculturally Zoned/ALR Land

Description: Farm on Agricultural Land Reserve or land zoned for agriculture within the city limits.

Owner: Varies

Urban Farming Practices

The core characteristics of urban farm practices are summarized below. While there is great diversity of techniques and approaches within urban farming, this description is intended to orient the reader to some of the most common characteristics of urban farming.

Farm practices: Urban farming practices tend to be more intensive involving techniques such as SPIN farming and permaculture to allow for high yields in small spaces. Other innovative urban farming techniques are also emerging such as aquaponics, a system that combines aquaculture (raising aquatic animals in tanks) with hydroponics (cultivating plants in water), and vertical farming operations (for definitions see glossary). While not all urban farms will necessarily be organic, it is desirable to limit or prohibit the use of agricultural chemicals in urban areas, as many municipalities have done already with cosmetic pesticide bans.

Crops: The most common type of crops for an urban farmer are fresh produce (salad greens, vegetables, berries, and fruit). Fresh produce is less regulated and easier to package and transport than other food products such as meat and eggs. Livestock is less common due to regulations, space, care, and nuisance complaints.

Soils and growing mediums: As most urban farmers use organic (i.e., natural) methods of production (i.e., no chemical fertilizers), healthy soil is vital for healthy crops. Compost is one of the main ingredients for growing, and a key feature of any farm. However, due to space restrictions or regulations that prohibit them from composting, many farmers cannot produce enough compost, relying on imported soil instead. Urban farms have the potential to become centers for organic waste recycling, where neighbourhood food waste could be composted and put back into food production. Soil contamination in urban areas is a common concern for farmers and measures are often used to mitigate this, such as soil testing, soil remediation and utilizing raised planter boxes for production.

Raised planter boxes on an industrial site in Vancouver, BC. These planters have been designed to be moved by a forklift.

Water: Like any farm, a reliable water source is required for irrigating crops, washing harvest and equipment, and general farm hygiene. Water in a city can come from many sources including piped water, well water, and treated stormwater.

Structures: Structures required for urban farms can include storage sheds for tools and equipment, potting sheds, greenhouses, cold or dry storage structures such as root cellars, and kitchen facilities for food handling and processing. Some urban farms may also require facilities for teaching, which could include kitchens and classrooms.

Greenhouse on a residential farm, Green City Acres, Kelowna BC

Value-added processing: The sale of value-added products such as canned fruit, pickled vegetables, and jams/jellies, are considered medium to high risk according to provincial health regulations. This means that there are many restrictions on small scale processing and regulations are often very challenging for small producers to adhere to. Links between certified commercial and/or community kitchens provide an opportunity for urban farmers and local food processors. Selling value added products can provide a key source of revenue and help decrease food waste. Future urban farms could also have on-site food processing facilities for larger scale food processing. This would help decrease food waste before it is consumed (e.g., over-ripe fruit and bruised vegetables that can't be sold from local grocers) and provide a diversity of local food products.

Home made jelly, Urban Digs Farm, Burnaby, BC

Challenges & Considerations for Farming Practices

Urban farmers can face certain challenges that are not necessarily experienced by rural farmers. These include:

Small livestock: The raising and selling of most livestock (and related products such as honey, milk, eggs), if permitted at all, is usually limited to bees and chickens. The sale of both eggs and chickens are regulated by Provincial health regulations. However, small livestock is often considered an essential part of the farm system and is an important component of nutrient cycling or pollination. Bees and chickens in urban areas can also be problematic due to real or perceived risks associated with health and safety; how to deal with them is often a divisive public policy issue. However, there are ample resources and examples of how to manage and plan for bees, hens, and other fowl including examples of how to keep them safely, ethically, and with no negative impact on neighbours.

Access to water: Irrigation can be a challenge if infrastructure is not in place, if the water source is limited (e.g., well water), or if the water is metered, which adds an extra cost. There also may be concerns around the use of potable water for irrigation in terms of straining local drinking water resources and adding costs for the general tax base. Accessing water for gardening or small-scale farming can be a more serious concern in places with water restrictions or a lack of ground or surface water access. Municipal water hook ups may be expensive or simply not available.

Soil: Often soil in urban areas is contaminated or too compacted to use, which may limit in-ground growing potential. Soil testing may be required for food production, which can be expensive. With limited space for compost production, urban farmers often have to bring in soil, which can be cost prohibitive and in some cases may require a soil deposition permit. In terms of composting, some municipalities prohibit composting outright limiting soil healthy production.

Farm structures: Structures such as greenhouses and storage facilities and fencing may require building permits, or may be prohibited altogether by zoning bylaws. Greenhouses are also associated with light and noise pollution and require careful regulation in residential areas (e.g., maximum size, light pollution mitigation strategies, etc.).

Nuisances: Nuisances from farm activities that may cause concern include aesthetics, dust, unpleasant odours, disruptive noises, visual impact of farm buildings and unkempt gardens, and contamination of surface or ground water sources. Due to the fact that the Right to Farm Legislation may or may not apply fully or in part to urban farming activities, municipalities may find that they need to more heavily regulate farm practices and/or and mediate conflicting stakeholder interests through consultation and facilitation, especially in geographic areas with facing challenges.

Local Government Responses

When it comes to farming practices, local governments are often charged with creative approaches to addressing the various issues that could compete with other urban activities. The following responses are some of those approaches.

Livestock: Some municipalities allow for a limited number of chickens, primarily for egg production for personal use only. Bees, goats, and pigs have also been allowed for production in some municipalities but are highly regulated (Just Food, 2012). The following examples of BC cities that allow the keeping of chickens and other farm animals with specific regulations:

- Hens and bees are permitted within city limits in the City of Victoria provided they are properly cared for and maintained. Secure outdoor shelter must be provided to contain hens or other outdoor domesticated animals and protect them from predators. Bee hives must be maintained to prevent swarming and placed far enough away from property lines to prevent them from impacting neighbouring properties (City of Victoria, 2011).
- In 2010, the City of Vancouver amended their animal control bylaw to allow domesticated hens (at least four months old) to be kept in urban areas subject to conditions for care and maintenance as well as enclosure siting and size. Up to four hens can be kept per property and must be registered with the city. Meat, eggs, and manure must not be sold and backyard slaughtering is not permitted (City of Vancouver, 2010).
- The City of Surrey also allows livestock and chickens on larger residential properties (One acre minimum) subject to limitations on the number and type of animals. A maximum of twelve hens, six sheep or goats, two livestock, and rabbits/chinchillas (unrestricted) are permitted per acre of property (City of Surrey, 1993).
- The City of Seattle allows the keeping of small animals, farm animals, domestic fowl and bees in all zones. This includes potbelly pigs and goats, with some restrictions. Farm animals such as cows, horses, sheep, and other similar farm animals (with the exception of swine), are permitted on lots with a minimum size of 20,000 square feet (City of Seattle, 2010).

Eggs from Urban Digs Farm, Burnaby, BC www.urbandigsfarm.com

Water: Some municipalities are addressing water conservation through outreach and education programs which can also apply to urban farmers. Rainwater capture is often promoted as a way to address the issue of using potable water for irrigation; municipalities across BC offer rain barrels at a subsidized price to residents to encourage conservation. Urban farmers can also provide education on responsible water use, irrigation system design and use of timers, watering schedules, plant water needs, soil water holding capacity, among others.

- In 2012, the Regional District of Nanaimo offered rebates of up to $450 for cisterns purchased by residents in certain districts. These cisterns had to be suitable for potable water and hold a minimum of 4,546 litres of water to be eligible for the rebate (Regional District of Nanaimo, 2012). Some municipalities have adjusted their bylaws to accommodate rainwater capture techniques. Dockside Green in Victoria, for example, collects rainwater and uses it for irrigation (BuildingGreen.com, 2009).

Soil: Often, the onus is on the farmer to determine the safety of the soils. With the appropriate permits (e.g., business license) in place, local governments would be able to require proof of soil testing and contaminated site mitigation. Also, local governments may share data and information with farmers on where contaminated sites are located. Where composting is prohibited, municipalities could adopt appropriate guidelines for urban farmers. In some cases local governments may require only a detailed site history to demonstrate low probability of contamination.

- The Toronto Site Assessment is a tool developed by Toronto Public Health for city staff to assess potential sites for community and allotment gardens, and to identify and mitigate areas that are contaminated but could be suitable for food production (Toronto Public Health, 2011).

Building/Facilities: Farm structures, such as greenhouses and sheds, often require building permits. Rooftop structures can also be considered in height restrictions for zoning bylaws, which can limit their viability. Municipalities have made some efforts to accommodate farm structures to support farming. Examples include:

- The District of North Saanich has exempted greenhouses from lot coverage calculations in all zones (District of North Saanich, 2012).
- The City of New York has removed greenhouses from height restrictions on buildings (New York City Department of City Planning, 2012).
- The City of Seattle allows dedicated food production on rooftop greenhouses with a 15 foot exemption to height limits in a variety of higher density zones (City of Seattle, 2010).

Greenhouse on Environmental Youth Alliance (EYA) rooftop garden Vancouver, BC. www.eya.ca

Nuisances: Given that most nuisances from urban farming will be identified through complaints, education about the role and value of urban farms and growing spaces is essential. Also, developing good neighbour policies and guidelines that lay out the behaviours and practices both farmers and their neighbours need to adopt will help to mitigate problems and build overall awareness.

Table 1: Typical urban farming practices

Characteristic	Urban Realities
Crops: Vegetables Micro greens Fruit Berries Chickens (can you sell eggs?) Bees	» Limited space for viable production » Chicken bylaws » Regulations against sale of processed foods (honey, jam, etc) » Community complaints about farm aesthetics
Growing medium: Compost Imported soil Raised planter boxes	» Soil contamination » Limited space for compost production » Community complaints about manure or compost smells
Water City water	» Irrigating with potable water » Water costs (if metered)
Equipment Rototiller Hand tools Bike and cart	» Noise complaints » Sp
Facilities Storage sheds Greenhouse	» Building permits » Limited space

Common Grind Farm truck, Penticton BC

SALES AND DISTRIBUTION

Food produced and/or raised on an urban farm is sold and distributed through four main channels: Community Supported Agriculture (CSA), farmer's markets, food retailers (i.e., grocers and restaurants) and farmgate sales.

"Our produce is picked early, dropped off only blocks away at our walk-in cooler in Fairview, then travels no more than 2 miles to arrive downtown"

- From website of Nelson Urban Acres, Nelson BC nelsonurbanacres.ca

Community Supported Agriculture: Community Supported Agriculture (CSA) involves up-front investments from clients in exchange for weekly produce deliveries from the farm. CSA boxes are often picked up from a pre-determined location (café, or community centre for example) or delivered right to the consumer.

In some cases, CSA boxes are picked up directly from the farm; however, depending on the location, this may not be permitted if municipal bylaws prohibit farmgate sales. Municipalities have also expressed concern around potential traffic impacts resulting from CSA pick-ups.

Farmer's Markets: In BC, farmer's markets are on the rise with over 130 markets across the province (BCAFM, 2012). These markets provide an ideal venue for product sales as they require little up-front investment and give farmers access to a willing customer base (i.e., consumers who visit farmer's markets tend to be supportive of local food). Farmer's markets are also important for promoting urban farming products, such as CSA memberships, and can help raise awareness about local farms. 2012 was SOLEfood Farm's first year of harvesting after expanding to four acres, and much of their success was attributed to sales from Vancouver's six farmer's markets (Dory, 2012). One drawback of the farmer's market is that farmers will either have to take time from the farm, or pay staff to tend to a table. Markets also require harvesting and packaging of produce the day before or the morning of the market.

Earth Apple Urban Farm of Burnaby, BC selling their produce at a local farmer's market. Courtesy of Julia Smith. http://earthapplefarm.com/

Grocery Stores: Some boutique grocery stores such as food co-ops, organic health food stores, or stores specializing in local foods will sell produce from urban farmers. More recently, some mainstream grocery stores have started to feature certain products from urban farms. In Richmond, BC, one Save-On Foods store is selling herbs and garlic scapes from the Sharing Farm, a Richmond based urban farm (The Sharing Farm Society, 2012).

Restaurants: There is a rising interest in selling local food in the restaurant industry. For three years in a row, locally produced food and sustainability were identified as the top two menu trends in a national survey of Canadian chefs (CRFSA, 2012). Produce from urban farms is becoming more frequent on menus as more restaurants continue to join the local food movement.

Farmgate sales: As with many small rural farms, farmgate sales can serve as another distribution stream for the urban farm. Farmgate sales are those sales that occur at the farm itself. In some cases, this might be a farmstand (where produce is sold through an honour system), a staffed table or building, or consumer purchases directly from the farmer. This allows the farmer to keep working while generating revenue. It also brings people to the farm to see where and how food is grown.

Challenges and Considerations

Although many urban farmers are selling and distributing their products successfully, there are still barriers that restrict them from legitimizing their operations.

Business licensing: Like any business, urban farmers are required to obtain a business license in order to operate. However, licenses may not be available because urban farm businesses are unique and may require special licenses. Applying for licensing and permitting may also be rigorous and costly.

Health and safety regulations: Food products that are sold by urban farmers must adhere to health and safety regulations. These regulations are set by both federal and provincial levels of government and apply differently to low and high risk foods. Most uncut produce is considered a low risk food and requires little to no certification from health inspectors. High risk foods include meat and dairy products, eggs, and many value-added products such as canned goods. These must be produced, stored, and packaged using strict guidelines involving certified commercial kitchens, food safe certification, and labelling laws, which is an expensive undertaking that most urban farmers do not pursue. However, as urban farming becomes more established, urban farmers may want to consider diversifying their products to increase revenue. Value-added products would bring additional revenue through the winter season, add to the local food market, and recover food waste before it enters the waste stream.

Farmgate sales: Most municipalities prohibit farmgate sales on non-agricultural lands, and take particular issue with farms in residential areas due to the perceived traffic impacts from customers sales.

Local Government Responses

The following are some local government approaches to addressing the sales and distribution of local food:

Business licensing: Perhaps because urban farming is still being developed as a practice, few BC municipalities have addressed the issue of business licensing. Chicago, however, has found a way to license urban farms under their Limited Business License category.

- The City of Chicago requires urban farms to have a business license as determined by the Department of Business Affairs and Consumer Protection and offers a Limited Business License (LBL) for urban farms and other businesses that do not fall under a designated category (City of Chicago, 2012).

Health and safety: If urban farmers largely keep to growing and selling fresh produce (i.e., low risk and ease of compliance with health and safety regulations), many of the regulations concerned with medium and high-risk foods will be eliminated. If further processing is identified as a business opportunity, certified kitchens in community centres and private buildings would be a very efficient way to support the potential for processing and adding value to urban farm products. Also, engaging local Health Authorities in policy development can help to ensure policy and regulatory alignment between municipalities, regional districts and the Province.

Farmgate sales: A range of municipalities have allowed for farmgate sales to some degree within their towns and cities. These include:

Farmgate Sales, Loutet Farm, City of North Vancouver, BC

- In Cowichan Valley Regional District, farmgate sales are permitted outright in agricultural resource zones, small lot agricultural zones, and agricultural/golf course zones. They are also permitted in agricultural market and agricultural institution zones, although this may require approval by the Agricultural Land Commission. Bylaws limit the retail sales area (300 m^2) and require at least half of the sales area to be reserved for foods produced on site (Cowichan Valley Regional District, 2012).
- City of Parksville, allows produce sales from any agriculture zone with no limitations on lot size or sales (City of Parksville, 1994).
- The Sunshine Coast Regional District zoning bylaw (which includes Halfmoon Bay, Roberts Creek, Elphinstone, and West Howe Sound) allows the sale of horticultural products including farm produce in R1 residential zones (parcel size exceeding 2000 square metres) and all rural zones (with the exception of rural forest and watershed protection zones) (Sunshine Coast Regional District, 1987). Horticultural means:
  - » "[...] the use of not more than one auxiliary structure or building permitted by this bylaw, not covering more than 10 square meters of a parcel, and the use of not more than one portable open air stand, not covering more than 3 square meters of a parcel, for the seasonal sale of fruits, vegetables, flowers.
- The Seattle Urban Agriculture Ordinance allows food to be sold from farms on residential sites (City of Seattle, 2010):
  - » Sales: retail sales and all other public use of the farm shall begin no earlier than 7:00 a.m. and end by 7:00 p.m. every day of the week.
  - » Deliveries: commercial deliveries and pickups are limited to one per day. On-site sales are not considered commercial pickups.
- The City of San Francisco allows the limited sale and donation of food grown on site to occur, except from within a dwelling unit (City of San Francisco, 2011).

"That's the trailer fully loaded... as you can see I've managed to jimmy-rig 15 on there, and might have been able to do one more layer for 20, but it was a struggle as it was getting up hills! "
- Emi Do, Yummy Yards, Burnaby & Vancouver, BC

Yummy Yards , Burnaby & Vancouver BC

Local Food Pedalers, Vancouver BC

Green City Acres, Kelowna BC

Fresh Roots Farm delivery, Metro Vancouver

A note about the "farm bike".....

One emerging phenomenon with urban farmers is the use of bicycles and trailers as their farm vehicle to distribute their goods. Trailers have been fitted to accommodate up to 20 CSA boxes for delivery. This is possible because many urban farmers are within cycling distance of their customers.

5. STORIES FROM THE FIELD

In order to learn more about current urban farming activities, future opportunities for urban farming, and current local government initiatives that may help facilitate urban agriculture and urban farming, the Guidebook authors consulted urban farmers and municipal staff in the communities of Campbell River, Kelowna, North Vancouver, and Vancouver. These communities were selected because they all have some level of urban farming activity within their city boundaries. The results revealed how different each of their experiences are, and that although urban farming as a practice is relatively similar in each city, the approach that municipalities take can depend on a number of parameters. For example:

- The City of Campbell River has already identified food and agriculture as a key issue in their planning process, despite not having agriculture as a major resource in the region. This municipal support has provided staff with the capacity to collaborate with the community to explore urban farming and other local food initiatives that may contribute to the revitalization of the town.
- The City of Kelowna has a significant of amount of agricultural land within the city boundary. They also have a successful urban farmer operating within the city; he has become well known across North America for his farm and work advocating for the practice. The City also has a local food and agriculture person on staff who is willing to explore policies and regulations addressing urban farming.
- The City of North Vancouver is one of the first cities in BC to establish an urban farm on a public park. This was initiated by a number of key players including the mayor and park staff, the University of British Columbia, and the North Shore Neighbourhood House Edible Garden Project, a non-profit food organization.
- The City of Vancouver currently has eighteen urban farms (and counting) within its city limits. The City has been working collaboratively with the Vancouver Urban Farming Society to address policy, regulation, and best practices for urban farming.

This section provides a description of the approach to urban farming in each of these communities and how they have responded to the challenges and opportunities of growing food in their municipalities.

The City of Campbell River

Although farming is not a primary industry in the City of Campbell River, agriculture plays an important role both socially and economically. In fact, the City has a vision to produce 10% of its own food by 2031, and has developed strategies to move in that direction. In 2011, the City adopted its Agricultural Plan, which outlined a number of strategies to support agriculture and urban farming, and in 2012, the City's Sustainable Official Community Plan outlined agriculture as a key driver of social and economic vitality.

With a significant amount of viable farm land within City boundaries (both ALR and non-ALR land), and a foundation of agricultural knowledge and local food interest, the groundwork is being laid toward realizing the City's vision.

Ross Mountain Blueberry Farm is a one acre urban farm operating on a residential acreage in the City of Campbell River. This farm is possible because nursery and large crops are allowed in specific residential areas (Ostler, 2011).

Urban farming in Campbell River:

- Approximately 5,000 hectares of viable Agricultural Land Reserve (ALR) within City boundaries.
- Growing conditions both inside and outside of the ALR to support a wide range of crops including blueberries, grapes, and mushrooms.
- Existing farmers with the skills and desire to teach others about growing food, especially youth.
- Interest exploring new ways to farm including agriculture trusts, co-ops, and direct farm marketing.
- Greenhouse production and alternative crops.
- The Farmer's Market has been identified as playing a key role in distributing local food and becoming a community gathering space.
- Extension services and education offered by North Island College are already in place including local food workshops and video series.
- Opportunities for linkages with the existing agricultural industry in nearby Comox Valley.
- Coastal Roots Vegetables is a local farm that produces over 20 crops on an acre of land. Produce is sold to the residents through a seasonal veggie box program (Coastal Roots Vegetables, 2010).

Moving urban farming forward – local government initiatives:

The City of Campbell River is already beginning to implement the freshly adopted OCP and Agriculture Plan with planning staff committed to collaborating with other partners and potential farmers. Specifically, some of the activities include:

- Supporting the North Island College's Lettuce Grow Series (a film and education awareness series on food security, urban farming, small scale food production) and most recently helping advertise/promote their Lettuce Grow courses on local food (e.g., hydroponics, winter gardening, soils, permaculture, etc.).
- Developing an initiative to create a Local Food Registry for farmgate sales, restaurants, and retailers to identify locally made products on an online map.

Conclusion:

Although Campbell River is just beginning their local food and agriculture movement, the groundwork and community interest exists to realize movement in this area. This example is of particular interest for those who are looking to food and agriculture to contribute to community revitalization and local economic development.

Resources:

Campbell River Sustainable Official Community Plan: http://sustainablecampbellriver.ca

Campbell River Agriculture Plan: http://sustainablecampbellriver.ca/?page_id=655

Comox Valley Growers Guide: http://www.investcomoxvalley.com/keySectors/agrifood.htm

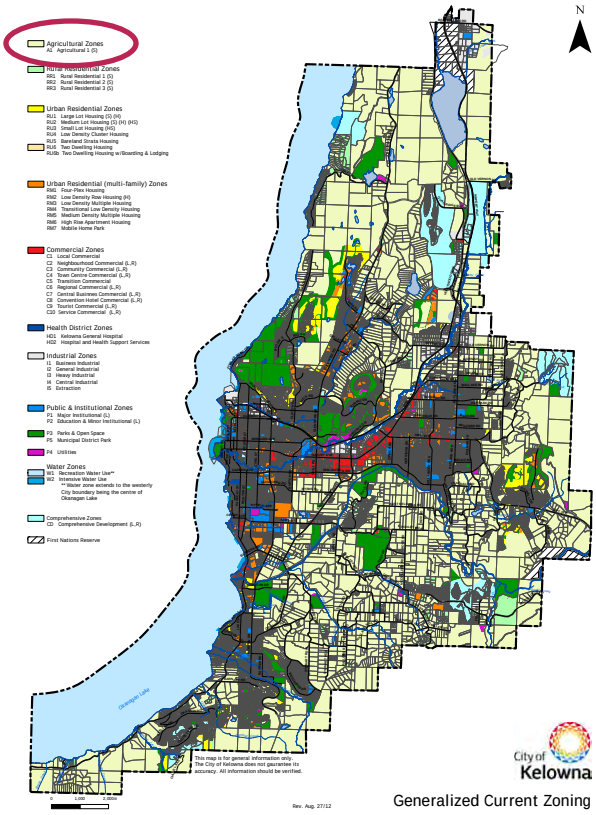
Coastal Roots Vegetables http://www.coastalroots.ca/about/

North Island College "Lettuce Grow" workshops http://www.nic.bc.ca/continuingeducation/

Ross Mountain Blueberry Farm, Campbell River, BC

The City of Kelowna

The City of Kelowna is located in one of BC's most productive agricultural regions, as well as one of the largest major growth regions in Western Canada. Agriculture is a prominent land use within the city boundary and many farmers still operate and farm these lands. Along with farm activity both within and outside of the ALR. There is also a growing local food economy with locally produced food being sold directly to chefs, food retailers, and the public through fresh box programs, CSA's, and a very popular farmer's market. Despite population growth and development pressure, the City has taken significant measures to protect urban farmland.



General zoning map of Kelowna. The light yellow represents Agriculturally zoned land (City of Kelowna, 2009).

A focus group consisting of rural and urban farmers, organic food delivery staff, local food restaurants, and City staff provided insight into the growing urban farming and local food economy, and the City's efforts to protect and support its agriculture.

Urban farming in Kelowna:

- Farms are operating on ALR and agriculturally zoned land and have been for generations. Some include farmgate sales and food processing.
- There are at least three urban farms in Kelowna, all active in the local food movement.
- Restaurants promoting local food are providing a viable market. There are already a number of partnerships in place between farmer's markets and local chefs.
- Urban Harvest Home Delivery is a successful local organic delivery program.
- Kelowna Farmer's Market provides a market for local urban food and is slated to move to a more permanent location.
- Urban farms are diverting organic waste from the landfill and using it for compost (Green City Acres diverts 1000 lbs. per week)

Green City Acres Farm, is an urban farm compiled from a series of residential yards within a 5km radius. Using SPIN (Small Plot Intensive Farming) methods, the owner, Curtis Stone, has been able to create a viable business from this model. Curtis has made a number of partnerships with local restaurants to sell his goods, he also sells to the local farmer's market and through a CSA program. Curtis reports that most of the neighbours support the farm (Stone, 2012).

Moving urban farming forward – local government initiatives:

Below are the various initiatives taken by the City of Kelowna to both protect and support agriculture within urban boundaries:

- The City of Kelowna's Official Community Plan recognizes agriculture as a vital component of the local economy.
- Urban Agriculture is a "Principal Use" in all of the single and two family dwelling zones, public, and institutional zones and a "Secondary Use" in the multi-family, commercial, and industrial zones.
- Agricultural areas (ALR and non-ALR) are designated "protected" under the Resource Protection Area designation.
- Home-based business bylaws allow for the sale of goods produced on site.
- Agricultural land and lands associated with agriculture, agri-tourism, greenhouse and plant nurseries, and garden stands require a development permit before subdivision or alteration.

Conclusion:

Kelowna has significant opportunities for urban farming within city limits that could complement the surrounding agricultural region. There is a high proportion of protected farmland within city boundaries, an urban farmer that is active in the community, a food sector that is supportive of local food, and some key policies in place that help remove some of the standard barriers to urban farming, such as zoning.

Resources:

City of Kelowna: www.kelowna.ca

Green City Acres Farm: www.greencityacres.com

Urban Harvest Home Delivery: urbanharvest.ca

The City of Vancouver

The City of Vancouver has eighteen urban farms and counting within its city limits with enough impact to be counted as operating farms by the recent census (Schutzbank, 2011). As urban farming helps meet many of the City of Vancouver's food policy goals, especially the goal of local food in the City's Greenest City 2020 initiative, the City has had special interest in working with urban farmers to find policy and regulation that fosters urban farming while mitigating risk. In 2012, the City formed an urban farming technical team that works closely with the Vancouver Urban Farming Society to address zoning, business licenses, and regulations that work for both parties. Although this profile focusses on the City of Vancouver, it is important to note that there are a number of urban farms and supportive organizations within the wider Metro Vancouver region that have been very involved in this process.

Since 2006, Urban Farmers in Vancouver have grown from 2 - 3 known farm business to 18 in 2012 (VUFS, 2012). The land area of urban farms has increased from 2.3 acres to 8.28 acres since 2010 (City of Vancouver, 2012).

Urban farming in Vancouver:

- In 2010, there were approximately 24 urban farms operating in Metro Vancouver; by 2012, those numbers grew to approximately 28 farms - 18 of which are located within the City of Vancouver's boundaries.
- In 2010, 50 urban farmers and supporters held their first gathering to address how urban farms could be more successful. Regulative barriers including zoning and business licenses were identified as major issues.
- In 2011, the City of Vancouver partnered with the Hastings Crossing Business Improvement Association to host the Vancouver Urban Farming Forum, a platform to bring the city and urban farmers together to discuss and address the issues and opportunities surrounding farming in the City of Vancouver. Over 100 participants attended, representing urban farmers, academics, municipalities, and food advocates. The results of the forum were compiled into recommendations (which included policy review for supportive zoning and business licensing) and were integrated into the City's Food Strategy.

Vancouver Urban Farming Forum, Nov, 2011

- In 2012, the Vancouver Urban Farming Society (VUFS) was officially formed and immediately began to research best practice standards for Vancouver urban farmers. The City of Vancouver also formed an urban farming technical team of City staff to explore zoning, licensing, and regulations. VUFS met with this group and hosted an urban farming tour to help inform City staff of current issues and opportunities.

Moving urban farming forward - local government initiatives:

- **Vancouver food charter:** Adopted in 2007, This charter sets out a vision for a sustainable food system. It outlines five key principles that show the City's commitment to municipal food policy and support for activity related to food security.
- **Vancouver Food Policy Council:** The Vancouver Food Policy Council (VFPC) is comprised of individuals from a range of sectors that collaboratively examine the operation of the local food system and provide ideas and policy recommendations for how it can be improved. The Food Policy Council has recognized urban farming as an important contributor to the local food system and has been supportive of urban farming initiatives in an official capacity since November 2010 (City of Vancouver, 2012b).
- **Greenest City 2020:** Vancouver has the goal of being the Greenest City in the World by 2020. 'Local food' and 'green economy' are two of ten areas of focus in this plan. The local food goal aims to increase city and neighbourhood food assets by a minimum of 50% (over 2010 levels) while the green economy goal aims to double the number of green jobs in the city by 2020 (over 2010 levels). In the draft action plan, urban farming is recognized as a neighbourhood food asset (City of Vancouver, 2012b).
- **Vancouver Food Strategy:** The City of Vancouver is currently developing a food strategy. The strategy is designed to help the City focus on specific goals and actions to improve the local food system. It will look at policies that affect how food is produced, processed, distributed, accessed, consumed, and recycled. The Vancouver Food Strategy, slated for adoption in January 2013, will identify strategies to support urban farming through land use, zoning, and supportive regulations (City of Vancouver, 2012).
- **City of Vancouver Beekeeping Guidelines:** In 2005, The City of Vancouver amended the health and safety bylaw to allow hobby beekeeping (City of Vancouver, 2010).
- **City of Vancouver Backyard Hens Bylaw:** In March 2010, policy guidelines were developed for the keeping of backyard chickens (City of Vancouver, 2010).

Conclusion:

There has been significant momentum in Vancouver toward establishing urban farming as an official business practice. Support has come from a cohesive, active urban farming community as well as a local government with a foundation of food system policy and staff that are dedicated to the food portfolio and committed to collaborating with the community.

Resources:

Vancouver Food Charter: http://vancouver.ca/people-programs/vancouver-food-charter.aspx

Greenest City Initiative: http://vancouver.ca/green-vancouver/a-bright-green-future.

Vancouver Food Policy Council: http://vancouver.ca/your-government/vancouver-food-policy-council.aspx

Vancouver Urban Farming Society: http://urbanfarmers.ca/

The City of North Vancouver

The City of North Vancouver has positioned local food production as a priority on their planning agenda. In 2009, the City of North Vancouver's 100 Year Sustainability Vision was adopted as a guiding document for the future of the city. One of the key goals is to increase green infrastructure, with local food production as one of the top five strategies. This profile highlights Loutet Farm, one of the City's most significant moves toward local food production. It is also one of the few examples of urban farms operating in a public park.

"Future resiliency necessitates the development of local, renewable energy and food systems" – (City of North Vancouver 100 Year Sustainability Vision, pg. 39.)

Background - Loutet Farm:

In 2011, the Loutet Park Urban Agricultural Project or "Loutet Farm," was established. This pilot project represents a partnership between the North Shore Neighbourhood House Edible Garden Project, the City of North Vancouver, and the University of British Columbia. It was designed to promote local food awareness and increase access to local, commercially grown produce within a not for profit organizational structure (City of North Vancouver, 2012).

Loutet Farm site in highlighted in green

Loutet Farm is a half acre farm located on a portion of public parkland which was previously under-utilized. It is administered and maintained by the North Shore Neighbourhood House Edible Garden Project through a five year lease agreement with the City. To allow for this type of use, the City of North Vancouver and the Neighbourhood House worked closely to identify potential risks and designated the farm as a pilot project in order to monitor on an ongoing basis. To date, minimal complaints have been received from the community (Hunter, 2012).

This park operates as a social enterprise with funds generated through the sale of produce being directed back into the operations of the farm. The farm is maintained by a paid farm manager and by volunteers. Throughout the season, courses and events centered on growing food are offered to the community and regular programming is offered for children attending a neighbouring elementary school.

The Loutet Farm Mandate is to provide a year-round harvest of locally grown produce with a commitment to:

- Creating social spaces for people to work and gather
- Integrating professional organic farming with innovative and sustainable practices including alternative energy
- Providing school aged children living in urban environments a hands-on farm experience
- Providing educational opportunities for up to 5,000 learners of all ages, cultures and sectors
- Encouraging physical activity and the role of food in a healthy lifestyle
- Becoming financially sustainable within five years

Loutet Farm - What's Working:

Since its opening, Loutet Farm has experienced a number of successes, including:

- Continued collaboration with the City of North Vancouver.
- Farmgate sales: Operating a farmer's market on site is identified as one of the approved uses in the revised land use agreement.
- The hiring of a farm manager.
- The 2012 Sustainable City Award from the City of North Vancouver.
- Received minimal complaints from the community.
- Established a volunteer program with 276 volunteers logging a total of 1300 hours in 2012.
- Engaged the community through education, events, and work parties.
- Loutet farm increased revenue by 450% in year two. They are on track to achieving financial viability within five years.

Loutet Farmers Market

Considerations for Municipalities:

Supporting urban farms on public lands is often a point of contention for municipalities and communities. However, it has been argued that urban farms can have numerous additional benefits as a community amenity including job creation, economic generation, animation of public space, and provision of local food.

Resources:

City of North Vancouver: www.cnv.ca

North Shore Neighbourhood House Edible Garden Project: www ediblegardenproject.com

6. THE ECONOMICS OF URBAN FARMING

This chapter has been authored by Caitlin Dorward, Marc Schutzbank, MSc, and Kent Mullinix, PhD, PAg from the Institute for Sustainable Horticulture at Kwantlen Polytechnic University.

Urban farms do not just produce food. They also function as outdoor classrooms, conversation starters, and ecosystem service providers. As such, urban farm operators are not only farmers; they are also educators and spokespeople for the food movement. They train future farmers, provide jobs for inner-city youth and those with barriers to employment, and increase urban consumers' awareness and understanding of agriculture and food system issues. This section will explore the revenues and expenses of urban and near-urban farms (both considered as urban farms).

Urban and Near-Urban Farm Revenue

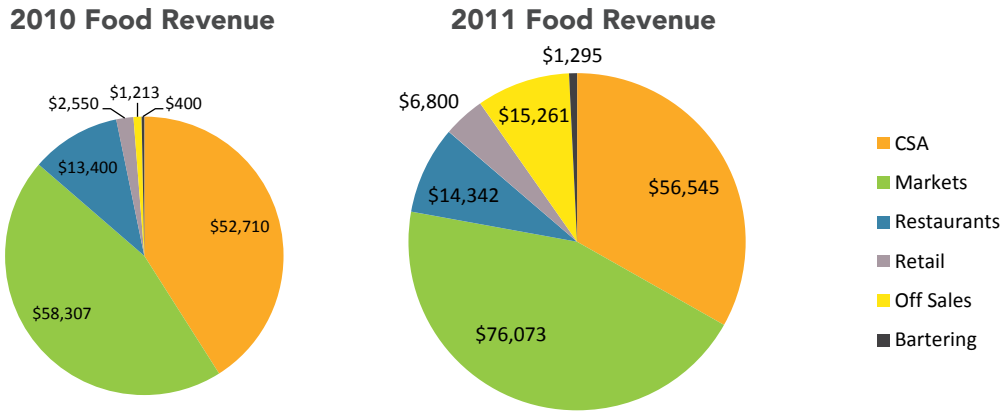
Just as urban and near-urban farm business models are diverse, so too are their revenue streams, which can be categorized as crop revenue, grants and donations, and other revenue such as consulting fees and teaching fees.

The majority of urban farm crop sales are made through various direct marketing channels. Under a Community Supported Agriculture (CSA) program, consumers pre-purchase a weekly "share" of the farmer's harvest. This sales model enables farmers to receive payment at the beginning of the season, a time when cash flow is challenging, and offers consumers the opportunity to develop a relationship with their food providers. Farmer's markets provide a venue where urban farmers can receive premium prices for their produce. Preparing for and attending the market day, however, takes farmers away from tending their crops. To mitigate this challenge, some urban farmers have begun working together to sell their products cooperatively. "Metro Vancouver City Farms" is one example of such a consortium of farmers. Farmgate sales are another venue that allow for direct consumer interaction and premium pricing, but without the farmer investing time and expense to travel to another point-of-sale site such as a farmers market. Direct sales are also made to restaurants, many of which are now seeking to capitalize on the local food movement by incorporating seasonal local produce in their menus.

While urban farmers have seen success with direct marketing channels, they still face significant barriers to accessing the retail grocery market. Retailers demand low prices, maintain prohibitive purchasing policies (such as requiring organic certification or Hazard Analysis Critical Control Point verification), and demand large quantities of produce that urban farmers typically cannot supply. Working with smaller, independent retailers is currently the most viable option, but other opportunities for retail grocery sales may arise as the capacity of urban farms increases.

Figure 3 summarizes the results from a census of urban farms in Vancouver. As the data demonstrates, over the course of one year, Vancouver's urban farmers saw a small increase in revenue and farmer's markets continue to be a key point of sales (Schutzbank, 2012).

Figure 3: Vancouver Urban Farms' Food Revenue



In addition to revenue from crop sales, many for profit urban farmers derive revenue by providing other unique services to their communities. Many urban farmers offer workshops on topics such as garden planning, soil management, and seed saving. Some host summer camps that teach agriculture to children and connect them to the food system through the urban farm and a host of farm-related activities. Urban farmers also act as "edible landscaping" consultants, working with homeowners to design and build backyard "foodscapes". The success of urban farm workshops, community programs, and consulting is directly linked to urbanites' increasing concern about food security and interest in local foods. Many citizens want to gain tangible skills to address these issues, and are willing to pay urban farmers to share their expertise.

Recognizing that urban farms contribute more to communities than just food, many local governments, foundations, and businesses have also made grant funding available to support organizations dedicated to sustainable local food production. Grants and donations therefore comprise a valuable revenue stream, utilized primarily by urban farming organizations with charitable or non profit status. Vancouver's Sole Food Street Farm, for example, is a highly successful urban farming social enterprise whose mission is to "empower individuals with limited resources by providing jobs, agricultural training, and inclusion in a supportive community of farmers and food lovers" (Sole Food Street Farms, 2012). Their recent expansion into a two-acre farm site in downtown Vancouver was supported through in-kind and financial donations from a variety of organizations including Vancity Credit Union, the Radcliffe Foundation, and Concord Pacific (Vancity, 2012).

Urban and Near-Urban Farm Expenses

Like all businesses, urban farming expenses are either fixed (constant regardless of volume of production) or variable (fluctuating with volume of production). Urban farming cost categories include labour; production inputs; and sales, marketing, and administration. Data reporting on these costs is not widely available, but included below are some findings from research conducted in Vancouver using an emergent "Urban Farming Census" methodology (Schutzbank, 2012). The figures reported here may not be accurate representations of individual farms or representative of urban farms in other municipalities, but provide some context for the discussion of urban farming expenses. For the complete methodology and findings of the Urban Farming Census, see Schutzbank, 2011, and Schutzbank, 2012.

Labour costs are generally the largest cost category for urban farms, as this type of farming is largely non-mechanized and therefore highly dependent on manual labour. Schutzbank's Census of Urban Farming indicates that Vancouver's urban farm workers receive wages ranging from $10 - $20/hour, commensurate with experience (Schutzbank 2012). Furthermore, Schutzbank found that some of Vancouver's urban farmers work as many as 80 hours/week during the height of the growing season (2012). Faced with small margins and high workloads, some urban farms reduce labour costs by soliciting volunteers or interns who work in exchange for agricultural training and farm produce. Although current interest in urban farming sees many applicants for these unpaid positions, developing more sustainable models of urban farm employment is critical for the future growth of the sector.

The Urban Farming Census also found that most of the owners of Vancouver's urban farms do not pay themselves an hourly rate or account for their own labour and management costs in their business expenses. Rather, they pay themselves from revenues after all other business expenses have been paid (Schutzbank, 2012). Best practice is to include "return to management" in planning budgets so that the urban farmer can anticipate a reasonable income from the farming business.

Production inputs include land, soil amendments, seeds, irrigation infrastructure, fertilizers, tools, and other items. Cash-flow is a perennial problem in agriculture that urban farms are not immune to, and as a result many urban farmers limit cash transactions to pay for these inputs, favouring barter or other methods of payment. Leases for urban farmland, for example, are often secured in exchange for landscaping services or farm produce rather than cash rent.

Schutzbank (2011) reports that Vancouver's urban farms' production supplies expenses reported in averaged $0.67/square foot in food production. There was wide variability in these costs, however, from a minimum of $0.11/sq foot to a maximum of $1.71/sq foot (Schutzbank, 2011). This range is reflective of the potential for urban farms to keep cash costs low by investing time into creative sourcing of supplies and capitalizing, as described above, on volunteer labour. As one farmer described, "we didn't have any big costs in 2010. This entire fence, all the logs, the uprights, that whole shed there, I built from 100% recycled materials and a lot of volunteer help" (Schutzbank, 2012).

Sales, marketing, and administrative expenses are not directly related to growing, but are critical to business operations. They include such things as insurance, phone and communication expenses, postage, and office supplies. Typically, these expenses are low for new urban farms, although as businesses grow, so too will this cost category. In some urban farming businesses these expenses are subsidized entirely by the proprietor(s), and not accounted for in business financial statements. For example, an urban farmer may use their personal vehicle for business purposes but never reimburse themselves from the farming operation. Although this is common in small businesses across many sectors, best practice is to track and account for all personal costs incurred because of business activity. This should be the standard that urban farmers strive to achieve as their revenues increase.

Profitability Potential of Urban and Near-Urban Farms

If anything can be said definitively about the profitability of urban and near-urban farming, it is that it varies widely due to differences in the farmer's skill level, customer relationships and marketing strategy, land tenure agreements, and farm goals.

A recent study conducted by the Institute for Sustainable Horticulture at Kwantlen Polytechnic University examined the profitability potential of small-scale, near-urban farms selling through direct markets in Surrey. Data used in the analysis was sourced from BC Ministry of Agriculture's "Planning for Profit" enterprise budgets, which estimate expected yields and fixed and variable costs of various crops. To increase confidence in the analysis and account for the inherent uncertainty of farming, costs were increased by 15% and yields decreased by 10% from those reported in the Planning for Profit budgets. Market price data was collected by the researchers from various retail and direct market sources in the Lower Mainland (Mullinix et al. 2012).

Using these methods (described in full in Mullinix et al., 2012), it was estimated that a one acre farm growing 29 fruit and vegetable crops and three animal products could generate approximately $24,000 in annual profit for the farm operator. Under a production scenario that prioritized only ten highly profitable crops, it was estimated that same acre could generate $46,000 in annual profit for the farm operator. These estimations are summarized in Tables 2 and 3 below.

Table 2: Potential Net-Profit of a 1 Acre Urban or Near-Urban Farm Growing 32 Crops and Animal Products (1)

Crop	Yield (2)	Net Profit (3)
Spinach	351 lbs	$2,555
Tomatoes	4, 208 lbs	$2,139
Pak Choy	490 lbs	$1,754
Snow Peas	279 lbs	$1,692
Chinese Cabbage	1,020 lbs	$1,385
Beets	539 lbs	$1,097
Pumpkins	819 lbs	$1,088
Cabbage	868 lbs	$1,055
Radishes	539 lbs	$1,021
Turnips	1,030 lbs	$846
Carrots	645 lbs	$816
Hazelnuts	68 lbs	$797
Kale	204 lbs	$649
Potatoes	534 lbs	$642
Pears	387 lbs	$642
Cucumbers	398 lbs	$639
Bell Peppers	253 lbs	$631
Yellow Onions	892 lbs	$627
Pole Beans	183 lbs	$556
Cauliflower	219 lbs	$485
Lettuce	611 lbs	$452
Honey (One Hive)	85 lbs	$433
Asparagus	122 lbs	$408
Table Grapes	163 lbs	$319
Garlic	93 lbs	$305
Eggs	124 doz	$257
Apple (Jonagold)	319 lbs	$255
Brussels Sprouts	287 lbs	$248
Sweet Corn	551 lbs	$213
Zucchini	270 lbs	$183
Broccoli	212 lbs	$177
Lamb	15 lbs	$40
TOTALS	**16,248 lbs (food) 124 doz (eggs) 85 lbs (honey)**	**$24,405**

(1) For complete data sources, and methodology (including crop price, fixed and variable costs) see Mullinix et al. 2012.
(2) Yield calclated based on each crop growing on 0.03 acre.
(3) Net Profit = Sales Revenue - (Variable Costs + Fixed Costs).

Table 3: Potential Net Profit \of a 1 Acre Urban or Near-Urban Farm Growing 10 Highly Protiable Crops (1)

Crop	Yield (2)	Net Revenue (3)
Spinach	1,097 lbs	$7,976
Tomatoes	13,148 lbs	$6,676
Pak Choy	1,530 lbs	$5,474
Snow Peas	871 lbs	$5,279
Chinese Cabbage	3,188 lbs	$4,320
Beets	1,683 lbs	$3,420
Pumpkins	2,559 lbs	$3,393
Cabbage	2,712 lbs	$3,290
Radishes	1,683 lbs	$3,184
Turnips	3,219 lbs	$2,635
TOTALS	**31,689 lbs (food)**	**$45,647**

(1) For complete data sources, and methodology (including crop price, fixed and variable costs) see Mullinix et al. 2012.
(2) Yield calclated based on each crop growing on 0.03 acre.
(3) Net Profit = Sales Revenue - (Variable Costs + Fixed Costs).

Although it is unlikely that a farmer would choose the exact crop production schemes outlined above, they are illustrative of the reality that urban and near urban farmers will benefit from careful analysis of their farm finances to determine how they can maximize profitability when land is the limiting factor. By prioritizing production of high value crops, urban and near-urban farmers can greatly increase the profitability of their businesses. SPIN (Small Plot Intensive) Farming is one type of vegetable farming system being promoted for near-urban and urban farmers that relies heavily on profit-potential based crop planning. SPIN Farming's developers purport that by using "precise, revenue-targeting formulas," SPIN farmers are able to gross over $50,000 from a half acre of land (SPIN Farming LLC 2012).

Assuming net receipts are approximately 50% of gross receipts, the profit potential from this kind of farming enterprise far exceeds most conventional farm types, and SPIN farmers across BC and North America are making it happen on the ground. Curtis Stone of Green City Acres uses SPIN Farming techniques on his urban farm in Kelowna. He sells his urban produce at farmer's markets and through a CSA program, and reports that he meets or exceeds SPIN's revenue targets after only two years of farming (personal communication, 2012).

The Vancouver Urban Farming Census suggests that urban farmers make returns comparable with rural vegetable farms, but that their salaries are not yet on-par with those of other urban jobs (Schutzbank, 2011). The profitability potential is there, but some urban farms have not yet achieved it, and this struggle will persist as a long as a number of current barriers to urban farming do too. Of particular concern from a financial perspective is the limited access to urban and near-urban agricultural land, the scarcity of financing for start-up urban farm businesses, and the presence of prohibitive bylaws.

Vancouver's Urban Farms are in the first three years of operation and still understanding their market. That being said, Vancouver's for profit urban farms are doing quite successfully. The 2010 average return for farm owner/operator was $13,745, though that ranges widely due to variation in land size and level of business development. Three of the eight urban farms surveyed took home less than $6,000 to pay the owner/operators (Schutzbank, 2011).

While some of these barriers can be overcome by urban farmers themselves, municipalities also have a critical role to play. In Surrey interest in under utilized urban agricultural land as an untapped resource for job and wealth creation prompted the City to commission the study, referenced above, to investigate the issue further. This study revealed the extent to which this small scale agriculture sector could contribute to Surrey's local economy, and outlined a number of strategies which Surrey could pursue in order to facilitate it (Mullinix et al., 2012). To this end, however, Surrey is not unique. Local governments across the board have a role to play in eliminating urban farming barriers by developing supportive policy and programming and in doing so stand to see real local economic benefit.

The demand for local produce is significant and growing, presenting entrepreneurially inclined urban and near-urban farmers with the opportunity to develop economically viable businesses. Key to their success will be the presence of allies in local government, neighbourhood councils, and the business community, who together can lend support the support needed for this sector to achieve its full financial potential.

7. LESSONS LEARNED: APPROACHES FOR BC MUNICIPALITIES

Urban farming is an emerging practice and there is much still to be learned from both farmers and municipalities. Local government responses will, of course, be guided by local context, experience, type, and location, as well as the presence and advocacy of urban farms.

Considerations for BC municipalities

When addressing urban farming there are some key considerations for municipalities.

1. It is worth exploring how urban farming can be fostered in municipalities and how it can align with local food system and sustainability strategies. Potential alignments include:
    - » Providing a local food source for cities (increasing resilience)
    - » Increasing access to fresh, healthy food
    - » Contributing to the vitality of the local economy
    - » Providing green jobs and fostering innovation
    - » Expanding the awareness and understanding of the food system
    - » Decreasing GHG emissions by using alternative distribution methods and decreasing the distance food travels

2. In its modern form, urban farming is a new business with a new market that will likely change over time. Governance will need to be flexible enough to respond to these changes. Key perspectives on effective management of urban farming include:
    - » Urban farming, as a business, does not fit into many current zoning codes and licensing bylaws and may require creative governance.
    - » Issues such as traffic, smell, or aesthetics related to urban farming may be real or perceived; municipalities should explore the realities of urban farming with existing farmers and neighbours before creating regulations. Both the urban farmer and the municipality play a role in the process.
    - » Collaboration, interdepartmental communication and understanding of both urban farming and municipal perspectives are imperative to creative successful policies, regulation, and best practices on the part of farming.

Recommendations

The recommendations listed below have been gleaned from consultation with BC municipalities and urban farmers and from best practice research.

1. **Support urban farming through planning processes:**
    - » Support urban farming, and local food activities in Official Community Plans and related community plans.
    - » Review existing policy and regulations to identify barriers and how policy and regulations can be changed and updated to support urban farming.
    - » Identify how urban farming can align with and support other policies or strategies.
    - » Establish a food policy council to support local food initiatives such as urban farming.
2. **Land Access and Restrictions:**
    - » Conduct a land inventory to identify viable land for food production and to identify sites suitable for urban farming.
    - » Consider allowing agriculture in most or all zones, including residential.
    - » Explore the suitability of urban farming in public parks.
    - » Explore temporary or long-term leases for farming on city-owned land (ideally, leases are a minimum of three years).
    - » Consider tax incentives for land holders to lease land for urban agriculture projects, including community gardens and urban farms.
3. **Licensing and permitting** :
    - » Develop a business license suitable for urban farming businesses.
    - » Explore ways to support farmgate sales from urban farms.
    - » Allow for small urban farm buildings such as greenhouses and storage sheds in zoning bylaws.
    - » Work with urban farmers to collaboratively develop a code of best practices and regulations/guidelines that establish a standard of good farming without stifling operations.
    - » Consider implementing short-term policy amendments in order to measure risk, challenges, and opportunities before implementing long-term regulations.
    - » Consider adopting bylaws that allow for chickens and beekeeping.
    - » Avoid reactive regulations by separating real versus perceived risks associated with urban farming.

4. **Collaboration and Support**

   - » Work with urban farmers to develop a mutual understanding of urban farming and the planning practice, and identify common challenges and opportunities.
   - » Bring together and facilitate discussions between different partners to support the practice of urban farming, especially where it meets broader municipal objectives.
   - » Support education and training programs through grants or in-kind support for farmer training and public education workshops for growing local food and healthy eating.
   - » Subsidize soil testing for nutrients and contamination.
   - » Subsidize and support urban farming efforts and innovations for diverting food waste into compost for urban farming.
   - » Collaborate with local chefs, food retailers, farmer's markets, and urban and near-urban farmers to assess the local food supply chain and identify the gaps and opportunities for business improvement, job creation, and supportive services.
   - » Support farmer's markets and food hubs as key conduits for local food distribution.

At this early stage of the practice, these are only some considerations and recommendations for local governments when addressing urban farming. As the practice develops the policy responses will no doubt be as diverse as the practice itself.

8. CHARTING A PATH

As towns and cities chart a path for the next generation, re-linking the food system to local energy, investment, and resources will propel communities towards greater growth, prosperity, and health. Urban farming is one strategy for developing strong local and regional food systems. The technical innovations, jobs, entrepreneurial opportunities, educational programs, and urban greenspaces that are created by urban farming help to stimulate community health and wealth. The partnerships that are developed through the planning for and coordinating of urban farming create new avenues for resource sharing and increase the potential for a broader range of local businesses, projects and initiatives.

Urban farming is complex. Growing food as a business outside of the areas that have been historically used for farming presents a new set of opportunities and challenges for local governments, in large and small communities. This Guidebook provides starting points and strategies for understanding both the potential and limitations of urban farming as well as examples from the growing number of BC, Canadian, and US cities who are implementing urban food programs.

Just as communities plan for transportation, housing, and infrastructure, elevating food and agriculture systems- including urban farming- to this same level provides key opportunities for prosperity and quality of life. George Orwell notes the need to raise the status of food and farming in society. In the *Road to Wigan Pier* he states,

> *"I think it could be plausibly argued that changes of diet are more important than changes of dynasty or even of religion....Yet it is curious how seldom the all-importance of food is recognized. You see statues everywhere to politicians, poets, bishops, but none to cooks or bacon-curers or market gardeners".*

Urban farming is an emerging sector with potential to bring many benefits to communities. Local governments are strategically positioned to become key partners in enabling urban farming and building strong local food systems.

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10. GLOSSARY

Agricultural Land Reserve: A zone of agricultural land regulated by the province of British Columbia to preserve and protect farmland from development pressure. The zone includes 4.7 million hectares of public and private land on which agriculture is promoted and non-agricultural uses are controlled (Government of British Columbia).

Aquaponics: A closed loop system (e.g., water tank) containing plants and aquatic species (e.g., fish, that share a symbiotic relationship, providing food and cleaning functions). A closed loop system is a self-sustaining system whereby wastes/outputs of one system element are used as a resource/input for another system element (Burmeister, 2012).

Community Garden: The practice of gardening or growing food either as a group or as an individual or family in a shared garden space. Community gardens are often located on public lands or undeveloped private land and are the result of a group of people coming together to make land available for gardening (American Community Gardening Association).

Edible Landscaping: Landscaping, typically in the public realm, that is designed with edible fruit, berries and nuts for public consumption. These landscapes are generally maintained by the city or volunteer residents or organizations (Creasy, 2009).

Enterprising non-profit: A not for profit business that aims to earn revenue while also achieving social or environmental goals and/or giving back to the community in some way. Once operational costs are covered, surplus revenues are used to achieve the organization's goals or support existing community initiatives (National Center on Nonprofit Enterprise).

Farm Practices Protection Act: Also known as the Right to Farm Act, this provincial legislation ensures the rights of farmers to farm on Agricultural Land Reserve (ALR) designated lands without undue hardship from surrounding land uses or local governments. The Act protects farmers from nuisance lawsuits or bylaws caused by normal farm practices (e.g., aesthetics, odours, noise, etc.), and provides a process to address complaints and concerns (Government of British Columbia, b).

Market Garden: The practice of growing a range of fresh produce, herbs and other foods for selling to restaurants and other food markets (Government of Alberta, 2008).

Permaculture: A design approach that mimics patterns and relationships found in nature, while yielding an abundance of food, fibre, and energy for the provision of local needs.

Social enterprise: A for profit business that aims to earn revenue while also achieving social or environmental goals and/or giving back to the community in some way (BC Centre for Social Enterprise, 2012).

SPIN Farming (Small Plot Intensive Farming): A vegetable farming system, usually in urban settings, that makes it possible to earn significant income from land bases under an acre in size. It is considered non-technical, easy to learn, and inexpensive to implement (SPIN Farming LLC, 2012).

Urban agriculture: The practice of cultivating, processing and distributing food in, or around, a village, town or city (Bailkey, 2000).

Urban farm (working definition): A portion of urban land where food is grown primarily for sale.

Urban farming (working definition): Growing, cultivating and distributing food within a city or town boundary to generate revenue. Revenue generating urban agriculture has also been termed market gardening, commercial urban agriculture and entrepreneurial urban agriculture.

Vertical Farming: Growing food in stacked trays, on green walls or through other systems to increase growing efficiency in small spaces. Hydroponics are often used in vertical growing systems (The Vertical Farm).