



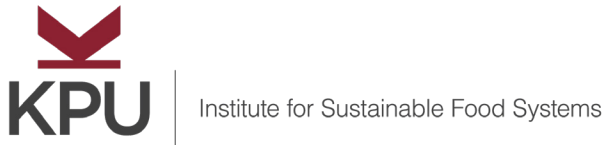
ORGANIC EXTENSION NEEDS ASSESSMENT

PHASE 3 REPORT: RECOMMENDATIONS

Prepared by:

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at Kwantlen Polytechnic University

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The Institute for Sustainable Food Systems (ISFS) is an applied research and extension unit at Kwantlen Polytechnic University (KPU) that investigates and supports sustainable agriculture and regional food systems as key elements of sustainable communities. We focus predominantly on British Columbia but also extend our programming to other regions. Our applied research focuses on the potential of regional food systems in terms of agriculture and food, economics, community health, policy, and environmental integrity. Our extension programming provides information and support for farmers, communities, business, policy makers, and others. Community collaboration is central to our approach. www.kpu.ca/isfs

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Disclaimer

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The Ministry thanks KPU for their work conducting an Extension Needs Assessment for the organic sector in B.C. The report(s) contain valuable information pertaining to the needs and current extension supports serving the organic and diversified farming sector in B.C. The Ministry of Agriculture, Food, and Fisheries wants to ensure an integrated approach to extension that includes all sectors and commodities, and we will incorporate the information contained in this report into broader strategies and plans going forward.

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EXECUTIVE SUMMARY

This report presents recommendations by the Institute for Sustainable Food Systems for the development of an coordinated British Columbia (BC)-wide organic extension service. Our recommendations are informed by the results of the needs assessment (Phase 1 and 2 Interim Report) and by ongoing discussions with collaborating organizations. This report will be integrated with the Phase 1 and 2 report previously submitted.


SUMMARY OF RECOMMENDATIONS

BOLD VISION, BROAD MANDATE

Our recommendation is to establish an extension service that aims to transform BC's agriculture and food system through widespread adoption of organic and regenerative practices. In addition to supporting certified organic producers and businesses, this service should be inclusive of all farmers and food businesses interested in adopting organic and regenerative practices. The long-term vision is to foster a thriving and resilient BC organic and regenerative agriculture and food system sector that contributes to economic development, climate change mitigation, environmental stewardship, food security, and the resiliency of BC and communities.

A COALITION OF COMMITTED COLLABORATORS

We recommend the following structure for a coordinated, collaborative extension service:

- High level direction and oversight provided by a small group of Directors with representation from the Ministry of Agriculture, Food and Fisheries (AFF), the organic sector (Organic BC, formerly COABC), and the First Nations Agriculture Association of BC (FNAABC). 
- Strategic leadership and program planning provided by a core Management Team comprising 5 universities, 1 non-governmental organization (NGO), and AFF (Organic Specialist).
- Development and delivery of extension programs by Primary Extension Providers, including dedicated extension agents hired by the Management Team and stationed regionally, as well as personnel/ programs at existing extension organizations.
- Operational and coordination support provided by 1 organization (Administration).

Our recommendation for implementation is to take a phased approach over 5 years, operating at half capacity (agents in 4 out of 8 BC agricultural regions) for the first 3 years and expanding to full capacity (agents in all 8 agricultural regions) in year 4 and 5. A phased approach will allow us to focus limited resources while building a strong track record among producers, policymakers, and funders.

PLANTING SEEDS WITH START-UP FUNDING

The estimated total cost of operating the organic extension service as recommended for the first 5 years is \$3,753,840. This includes a yearly \$28,200 in-kind contribution from partner organizations on the Management Team. The cash contribution needed to start and operate this initiative over 5 years is \$3,612,840.

Our recommendation for the funding strategy is to take a phased approach in line with the implementation.

- Start up funding over year 1-5.
- Sustained funding after year 5. The estimated annual budget after year 5 is \$1,013,184.00.

Over the first 5 years, the Management Team will focus on development of a sustainable funding model as a key priority area. We have identified a number of funding options for further investigation, including:

- Sector-led fundraising campaign to build an endowment.
- Sector funding mechanism such as a levy, licensing fee, or allocation of a portion of organic certification fees.
- Cost recovery through fee-for-service on some programs.
- Contributions from provincial and regional governments.

COMMUNICATION IS CRITICAL

We do not have a detailed communications and outreach plan/recommendation at this time. The development of an effective internal communication system must be prioritized in the next stage of developing the organic extension service.

CALL TO ACTION

We have garnered significant interest and momentum from collaborators who are committed to continue developing the extension service. However, the reality is that this project cannot move forward without additional support. Start-up funding is critical in enacting these recommendations.

We believe a coordinated BC-wide organic extension service meets the foundational principles outlined in the Minister's mandate letter around reconciliation, equity, climate action, advancing regenerative agriculture, and sustainable economic development. The time is right for AFF to demonstrate leadership by supporting this initiative. Public investment in organic and regenerative agriculture must be a part of our province's pandemic recovery plan. Organic extension has the potential to support our agriculture and food sector to build back stronger, with sustainability and equity at the core.

1.0 PURPOSE & OBJECTIVES

Our recommendation is to establish an extension service that aims to transform BC's agriculture and food system through widespread adoption of organic and regenerative practices. We have drafted the following high level statements as a foundation for the overall direction of the proposed extension service, with the intent that they will be further developed and elaborated upon by the Directors and Management Team.

1.1 PURPOSE AND SCOPE OF WORK

MISSION

To promote widespread understanding and adoption of organic and regenerative practices throughout BC's agriculture and food system.

VISION

A thriving and resilient organic agriculture sector in BC, where

- Organic and regenerative agriculture and food production is increasingly profitable at the farm level
- Organic and regenerative practices are widely adopted throughout BC's food system
- Organic and regenerative produced foods are widely available to and preferred by all BC residents
- Organic and regenerative agriculture and business are major contributors to provincial, regional, and local economic development

PRINCIPLES

- Collaboration- Facilitate substantial collaboration and cooperation among extension end users and extension providers.
- Evidence-based- Develop programs based on sound science.
- Accountability- Report to participants, sector members, and stakeholders about activities and impacts.
- Accessibility- Actively reduce barriers to accessing and participating in extension.
- Respect and Inclusivity- Incorporate different cultural worldviews and food ways in extension.

AUDIENCES

Primary audiences:

- BC's organic farmers and food businesses – To increase sustainability and viability of the organic sector, and to grow participation in the sector.
- All BC farmers and food businesses – To increase the sustainability and profitability of their operations through adopting organic and regenerative practices.
- Indigenous Nations and communities – To increase access to culturally appropriate, accessible information and support regarding regenerative and organic agriculture to meet community food objectives.
- Consumers/general public – To increase awareness, understanding, and demand for organic and regenerative food.

OUT OF SCOPE ACTIVITIES

Examples of out-of-scope activities:

- Consumer organic marketing campaign similar to Buy BC (although educational activities for consumers would be in scope).
- Extension focused on topics that run counter to organic and regenerative methods and principles (e.g. advice or field days promoting synthetic pesticides or fertilizers).
- At this time, our recommendations do not cover extension for organic aquaculture and fisheries, although we recognize that aquaculture and fisheries are important for local coastal communities.

1.2 OBJECTIVES

Effective extension programming is objective or outcome driven, targeted (to a specific sector) and purposefully strategic (based on common goals and direction). We recommend that immediate, medium-term, and long-term objectives be further developed by Directors and Management Team in ongoing collaboration with key actors. We have drafted the following objectives as a starting point for discussion (Table 1).

Table 1. Immediate, medium-term, and long-term objectives for organic and regenerative extension programming.

Immediate Objectives (1-5 years): Change in awareness, knowledge, opinions, skills, aspirations
<p>BC's farmers and food businesses:</p> <ul style="list-style-type: none"> • Increased understanding and awareness of regenerative and organic principles and methods • Increased access to regionally-specific, high-quality information about regenerative and organic production/post-production and business management • Increase in awareness of extension programming/services and potential benefits
<p>Indigenous communities:</p> <ul style="list-style-type: none"> • Increased access to culturally appropriate, accessible information and support regarding regenerative and organic agriculture and business development/management to meet community food objectives
<p>General public:</p> <ul style="list-style-type: none"> • Increased public/consumer awareness and understanding of the purpose and value of organic and regenerative agriculture and food • Increased market share of organic and regenerative produced food
<p>Sector-wide:</p> <ul style="list-style-type: none"> • Increased coordinated provincial and regional organic research activities • Increased dissemination of organic research results back to the sector • Establish strategic partnerships with stakeholders (industry, government, NGOs, and educational institutions) to meet extension objectives

Medium-term Objectives (5-10 years): Change in practices, behaviours, policies, social action, choices

Sector growth:

- Increased adoption of organic, ecological, and regenerative agricultural practices in all regions in the province
- Increased number of conventional producers transitioning to organic production
- Increased number of new entrants to organic and regenerative farming
- Increased number of organic post-production businesses

Sector viability:

- Improved profitability and viability of organic/regenerative farms and post-production businesses
- Increased supply of organic ingredients for the processing market
- Increased consumer awareness, demand, and advocacy for organic and regenerative produced food

Focused:

- Development of successful partnerships and programs with Indigenous Nations and communities that are engaged in or desire to engage in organic and regenerative agriculture alongside traditional foodways to create community benefits (i.e. food security, economic development, job creation)
- Policy and institutional support for organic and regenerative agriculture and food among industry, government, NGOs, and educational institutions

Long-term Objectives (more than 10 years): Social, economic, environmental impacts

A thriving and resilient organic agriculture sector in BC, where:

- Organic and regenerative agriculture and food production is increasingly lucrative
- Organic and regenerative practices are widely adopted throughout BC's food system
- Organic and regenerative produced foods are widely available to and preferred by all BC residents
- Organic and regenerative agriculture and business are major contributors to provincial, regional, and local economic development
- BC is a recognized global leader in organic and regenerative farming methods and food production

2. OPERATIONS

2.1 STRUCTURE AND COLLABORATORS

We recommend a coordinated and collaborative extension service structured as follows:

- High level direction and oversight provided by a small group of Directors with representation from AFF, sector (Organic BC), and the First Nations Agriculture Association of BC (FNAABC).
- Strategic leadership and program planning provided by a core Management Team comprising 5 universities, 1 NGO, and AFF (Organic Specialist).
- Development and delivery of extension programs by Primary Extension Providers, including dedicated extension agents hired by the Management Team and stationed regionally, as well as personnel/ programs at existing extension organizations.
- Operational and coordination support provided by 1 organization (Administration).

The following organizations have indicated interest and willingness to participate in the coordinated organic extension service as Directors or Management Team members, and have confirmed general agreement with the recommended structure (Table 2).

Table 2. Organizations committed to participating in organic extension service as Directors and Management Team members.

Organization	Primary Contact(s)	Notes from Discussions with Collaborators
Directors		
Organic BC	Eva-Lena Lang, Executive Director	Organic BC Working Group agreed that it is critical for the organization to be a Director.
AFF	Emma Holmes, Organic Specialist	Recommended engagement of AFF based on conversations with Organic Specialists: Representative from AFF on Directors Committee (to be determined) Organic Specialist on Management Team and Extension provider (average of 0.2 FTE) Numerous Regional Agrologists and Specialists (to be determined) participate as Extension providers (average of 0.05 FTE per position)
FNAABC	Trevor Kempthorne, Manager	FNAABC Board of Directors has indicated willingness to collaborate with organic extension service via letter of support

Management Team		
KPU Institute for Sustainable Food Systems (ISFS)	Dr. Kent Mullinix, Director Dr. Wallapak Polasub, Senior Research Associate	KPU ISFS is also prepared and positioned to take on the Administration role. Senior KPU administration is supportive. Committed to be on the Management Team and can commit .5 FTE to direct extension programming
TRU Applied Sustainable Ranching Program (ASUR)	Gillian Watt, Program Director	TRU ASUR is interested in hosting regional extension agent in partnership with the BC Interior Soil Health Association, a nascent group of Kamloops, Cariboo, and Shuswap-based researchers, ranchers, farmers passionate about regenerative agriculture. Committed to be on the Management Team. Able to connect extension service with other TRU faculty/researchers.
UBC Faculty of Land & Food Systems (LFS): - Centre for Sustainable Food Systems (CSFS) - Sustainable Agricultural Landscapes Lab (SAL)	Dr. Laura Morillas, Research Manager Clare Cullen, Operations Director Jessica Latus, Special Projects Manager Camil Dumont, Education Manager Dr. Sean Smukler, Associate Professor	CSFS committed to and will assign a Management Team representative after completion of internal strategic review. SAL is strongly committed and has indicated willingness to contribute knowledge transfer research funds to extension service (estimated value \$35,000 per year).
UFV Agriculture	Dr. Renee Prasad, Assistant Professor	Can commit to 0.05% FTE as Management Team and extension provider. Sees future opportunities for others at UFV to engage with extension service.
UNBC Office of Research and Innovation	Serena Black, Agriculture Extension Specialist	UNBC is committed to actively participating in this service. They are seeking funding for a regional food security project, and have incorporated the university's involvement in the organic extension service into their funding proposal. Committed to be on the Management Team.
Northern Environmental Action Team (NEAT)	Bess Legault, Northern Co-Hort Coordinator	NEAT has provided a letter of support for this project and is willing to host a regional extension agent, including office space in the Peace Region. Committed to be on the Management Team.
AFF	Emma Holmes, Organic Specialist Karina Sakalauskas, Industry Specialist for Emerging Markets, Organics, and Hazelnuts	(see above note under Directors)

Outside of the formal structure, we anticipate that partnerships will emerge with potential supporting organizations (e.g. provincial/regional NGOs, Agriculture and Agri-food Canada) around specific extension programs that align with their organizational purpose and goals. The following represents examples of organizations that are interested in future partnerships or supportive roles but not able to make firm commitments at this time due to lack of capacity and funding (Table 3).

Table 3. Organizations interested in future partnerships with organic extension service.

Organization	Primary Contact(s)	Points of Alignment with Organic Extension Service
Kootenay Boundary Farm Advisors (KBFA)	Rachael Roussin, Program Coordinator Michele Bates, Planner at Regional District of East Kootenay	KBFA Steering Committee has provided a letter of support indicating their willingness to contribute in-kind services and to align KBFA work with any organic/regenerative extension programs in the Kootenay region. Additional extension capacity is much needed and is not seen by KBFA as a competitor.
Farm Folk City Folk (FFCF)	Anita Georgy, Executive Director	FFCF is willing to be involved as a key partner for extension programs involving organic seed production and movement-building around climate-smart agriculture. They are open to deeper engagement in the future (e.g. joining Management Team).
Agriculture and Agri-food Canada (AAFC)	Jesse Macdonald, Knowledge and Tech Transfer Officer	Jesse is willing to partner with a potential organic extension service to make connections with relevant AAFC research projects.
Young Agrarians	Sara Dent, Executive Director	No definitive commitment due to funding constraints. Current capacity is limited to providing support through referrals and promotion of extension to their networks. Interested in future participation but would require additional capacity and funding.
Central Okanagan Economic Development Commission	Stephanie Slaman, Business Development Officer	Can provide support through referrals and promotion of programs through their communications channels.

BC Agricultural Climate Adaptation Research Network (ACARN)	Shauna MacKinnon, Coordinator	No definitive commitment due to funding constraints. Reconnect in future to identify common objectives and mutually beneficial partnerships.
Climate and Agriculture Initiative	Emily MacNair, Director	No definitive commitment due to funding constraints. Reconnect in future around potential partnerships for regional programs.
Alberni-Clayoquot Regional District (ACRD)'System Change' Project.	Heather Shobe, Agricultural Support Worker	Coordinated organic extension would be a helpful touchpoint for regional districts seeking to connect with researchers. They have received funding for a 3-year regional agricultural support initiative in the ACRD. Reconnect in future to give project updates and identify further partnership opportunities.

2.2 ROLES AND RESPONSIBILITIES

Roles and responsibilities are described in more detail in Table 4 and Figure 1. Although each role has different levels of responsibility and accountability, we envision that there will be fluidity in roles. Some organizations may have staff in multiple roles. We also envision that working relationships will be highly collaborative, rather than a top-down, command-and-control approach.

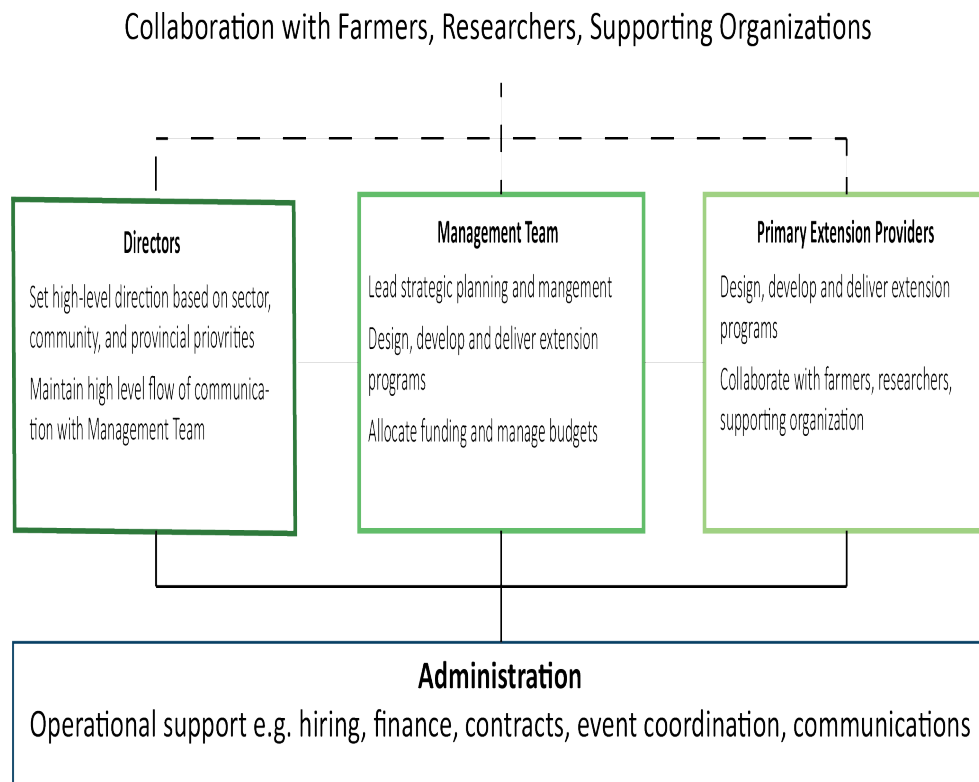
Table 4. Detailed roles and responsibilities of Directors, Management Team, Principal Extension Providers/ Personnel, and Administration.

Role	Accountability	Responsibilities
Directors	<p>Accountable for:</p> <ul style="list-style-type: none"> High level accountability and scrutiny <p>Accountable to:</p> <ul style="list-style-type: none"> Sector Public Funders <p>Time commitment:</p> <ul style="list-style-type: none"> Semi-annual, half-day meetings 	<p>Assure appropriate extension service function based on sector, community, provincial, and Indigenous Nations priorities</p> <p>Maintain high level flow of communication with the Management Team</p>

<p>Management Team</p>	<p>Accountable for:</p> <ul style="list-style-type: none"> • Strategic program planning and management • Resource allocation • Program assessment <p>Accountable to:</p> <ul style="list-style-type: none"> • Directors • Sector • Extension staff/extension providers <p>Time commitment:</p> <ul style="list-style-type: none"> • Monthly half-day meetings • Fairly regular e-mail communications • Average of 0.1 FTE annually 	<p>Lead strategic program planning and management of extension service.</p> <p>Monitor program effectiveness</p> <p>Design, development, and delivery of short and long-term extension programs.</p> <p>Allocate funding and resources; oversee budgets</p> <p>Management team members are organizations that can commit capacity to management as well as program delivery</p>
<p>Principal Extension Providers/ Personnel</p>	<p>Accountable for:</p> <ul style="list-style-type: none"> • Establishing and maintaining an effective 2-way communication conduit between the sector and the Management Team • Program design, development, delivery • Facilitating internal and external collaborations <p>Accountable to:</p> <ul style="list-style-type: none"> • Management Team • Extension team/collaborative <p>Time commitment:</p> <ul style="list-style-type: none"> • Varied, but will include full-time dedicated regional extension agents 	<p>Communicate needs, priorities, feedback of sector and regions to Management Team</p> <p>Design, development, and delivery of short and long-term extension programs based on strategic direction set by Management Team</p> <p>Operate as regional extension hubs</p> <p>Provide input on program design and development.</p> <p>Collaborate and build relationships with farmers, researchers, etc.</p> <p>Support extension personnel and programs provincially, as appropriate/needed/directed by Management Team</p>

Administration	Accountable for: <ul style="list-style-type: none"> • Extension service day-to-day operations Accountable to: <ul style="list-style-type: none"> • Directors • Management Team Time commitment: <ul style="list-style-type: none"> • Create a dedicated position 	Communicate needs, priorities, feedback of sector and regions to Management Team Design, development, and delivery of short and long-term extension programs based on strategic direction set by Management Team Operate as regional extension hubs Provide input on program design and development. Collaborate and build relationships with farmers, researchers, etc Support extension personnel and programs provincially, as appropriate/needed/directed by Management Team. Operational support for Directors, Management Team, Principal Extension Providers/Personnel, Supporting Organizations Hiring, finance, contracts, event coordination, procurement, internal and external communications
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Figure 1. Coordinated and collaborative structure of extension service, showing key roles and responsibilities.



2.3 PHASED IMPLEMENTATION

Our recommendation is to implement the extension service incrementally: start-up for the first 3 years, operating in 4 regions, expanding to all regions in year 5 (Table 5). Starting at a smaller scale will focus on organizational development and efficient, effective, high-quality programming to build a strong track record among producers, policymakers, and funders. Identification of the 4 start-up regions will be determined by the Management Team and Directors. Year 4 and 5 will focus on expanding programs and services to all regions in the province, with the goal of operating at full service capacity after year 5. The 5-year implementation strategy will also allow the Management Team and Administration to develop and transition to a sustainable funding structure (see Funding Strategy section below).

Table 5. Focus and deliverables for each implementation phase of organic extension service

Start-up (year 1-3)	Scale-up (year 4-5)	Sustain (year 6+)
<p>Focus</p> <ul style="list-style-type: none"> Establish coordinated extension framework with programs in 4 regions (4 regional agents hired) Create systems for shared management, communication, program collaboration, and administration Build a track record of success and attract support from sector and potential funders Gather data to build business plan to inform fund development <p>Start-up Deliverables – Extension Delivery</p> <ul style="list-style-type: none"> Development and delivery of extension programs, services, resources (pilots/prototypes). Hiring of dedicated extension personnel <p>Start-up Deliverables – Organizational and Fund Development</p> <ul style="list-style-type: none"> Strategy and action plan Financial plan Fund development plan Hire administration staff person 	<p>Focus</p> <ul style="list-style-type: none"> Scale up coordinated extension framework to support programs in 8 regions (8 regional agents hired). Refine and improve extension programs, services, resources based on year 1-3 results and evaluation. Refine business plan and funding strategy based on year 1-3 activities. Transition funding away from start-up grants towards sustainable funding sources. 	<p>Focus</p> <ul style="list-style-type: none"> Deliver extension programs at full capacity across the province Secure sufficient core funding from sustainable sources (not soft-funded).

2.4 PRIORITY AREAS AND KEY ACTIVITIES

We envision the extension service will have 3 priority areas of work over the first 5 years, led by the Management Team (Table 6).

- Extension programming planning and implementation.
- Organizational/operations development.
- Sustained funding strategy development and pursuit by Management Team and Administration.

Table 6. Priority areas, broad goals, and key activities of organic extension service over year 1-5.

Priority Area	Broad Goals	Key Activities
<p>Extension program planning and implementation</p>	<p>Increase in understanding/ awareness/ skills/access to information pertaining to organic and regenerative methods, best management practices.</p> <p>Increase in awareness of and support for extension programming/services and benefits.</p>	<p>Regional program development and delivery</p> <ul style="list-style-type: none"> • Conceptualize in-person and online programming. • Direct delivery of programs (e.g. demonstrations, workshops, field days, webinars, etc). <p>Provincial program development and delivery</p> <ul style="list-style-type: none"> • Establish advising service (with free and fee-for-service options?). • Online resource and information hub (e.g. bulletins, videos, newsletter). • Conceptualize and direct delivery of inter-regional programming. <p>Regional outreach and relationship building</p> <ul style="list-style-type: none"> • Outreach with local producers- businesses to introduce extension service, identify ongoing needs, establish reciprocal communication channels and support extension service-organic sector networking. • Meet and establish relationships with key regional organizations (e.g. Indigenous communities, farmers institutes, regional NGOs, local and regional governments, regional agrologist, certifying bodies, economic development offices, researchers). <p>Provincial outreach and relationship building</p> <ul style="list-style-type: none"> • Establish relationships with key provincial organizations (e.g. producer associations, NGOs, post-secondary institutions, funders).

<p>Organizational development</p>	<p>Development of an effective coordinated and collaborative organic extension organization.</p>	<p>Develop annual and 5-year strategy and programming plan.</p> <p>Hire, on-board, supervise and monitor regional extension personnel.</p> <p>Monitor and evaluate extension service programming.</p> <p>Establish efficient communication, coordination and administration systems.</p> <p>Monitor and evaluate finances; establish program allocation.</p>
<p>Funding strategy development</p>	<p>Development of a sustainable funding stream for extension service.</p>	<p>Develop sustained funding strategy.</p> <p>Develop 5-year capital/endowment campaign.</p> <p>Identify and cultivate potential donors, including foundations, banks, corporate funders.</p> <p>Develop sector funding mechanism (i.e. check-off or levy) in partnership with Organic BC and other agriculture associations.</p> <p>Raise awareness and profile of extension service, including outreach to media, policymakers, funders, retailers, and consumers.</p> <p>Develop and test fee-for-service model.</p>

2.5 CASE STUDIES

We have developed 3 case studies to illustrate how the proposed roles will work with each other and with other collaborating organizations to develop and deliver short-, medium-, and long-term extension programs (Tables 7-9). Each case study is hypothetical but grounded in findings of the needs assessment.

Case Study: Provincial Initiative to Double Certified Organic Acreage over 10 Years

STRATEGIC PLANNING

Directors identify strategic priority to double the certified organic acreage in BC over 10 years.

Management Team, with operational support from Administrator:

- Establish organic conversion support as a key priority area (including specific milestones, objectives, activities, etc.)
- Identify key partners (Primary Extension Providers/Personnel and Supporting Organizations) to co-develop and deliver a program plan, which will be reviewed and renewed after 5 years
- Review program plan annually and make improvements or changes based on results
- Report to Directors on progress, successes, challenges, and lessons learned

PROGRAM PLANNING

Management Team and Primary Extension Providers/Personnel develop programs with operational support from Administrator:

- Consult with producers about organic conversion needs
- Consult with certifying bodies and Organic BC to identify improvements to certification process
- Consult with distributors, wholesalers, retailers to identify organic market opportunities and needs
- Identify organic farmers willing to mentor or share knowledge about organic conversion
- Develop content, tools, curriculum (e.g. soils management, pest management, business management during organic transition)
- Hire extension agents to increase capacity for program delivery and evaluation

PROGRAM DELIVERY

Management Team and Primary Extension Providers/Personnel deliver programs with operational support from Administrator:

- Deliver workshops, webinars, on-farm demonstrations
- Connect in-transition farmers with organic mentors
- Connect in-transition farmers with distributors/wholesalers/retailers interested in organic products.
- Communications campaign to promote programs and increase consumer interest
- Share tools, resources, and curriculum online with Supporting Organizations to promote to their networks

MONITORING AND EVALUATION

Management Team conducts program evaluation with operational support from Administrator:

- Monitor progress on milestones
- Collect data on conversion acreage, challenges, feedback
- Review and improve program plan based on successes and challenges
- Report back to Directors on a quarterly basis about progress

Case Study: Regional Initiative to Increase Adoption of Organic/Regenerative Soil Management over 5 Years

STRATEGIC PLANNING

Directors and Management Team set strategic priority of increasing adoption of organic and regenerative soil best management practices over the next 5 years.

Management Team, with operational support from Administrator:

- Identify the hay and forage sector as strategic partner due to vast acreage and strong interest in regenerative practices
- Develop program partnerships with hay and forage producer associations (e.g. BC Interior Soil Health Association)
- Identify key partners (Primary Extension Providers/Personnel and Supporting Organizations) to co-develop and deliver a 5-year program plan to increase adoption of organic and regenerative soil management practices among hay and forage producers
- Review program plan annually and make improvements or changes based on results
- Report to Directors on progress, successes, challenges, and lessons learned

PROGRAM PLANNING

Management Team and Primary Extension Providers/Personnel develop programs with operational support from Administrator:

- Consult with hay and forage producers about current soil practices and needs. Collaborate with soil health researchers to integrate extension with applied research
- Identify hay and forage farmers who have improved their farm viability by adopting regenerative soil practices, to serve as mentors and experts
- Develop content, tools, curriculum on regenerative soil practices (e.g. cover crops, diversified rotations, high intensity rotational grazing, no-till, etc.)
- Hire additional extension personnel in key regions (Thompson-Okanagan, Peace, Cariboo) to increase capacity for program delivery and evaluation

PROGRAM DELIVERY

Management Team and Primary Extension Providers/Personnel deliver programs with operational support from Administrator:

- Deliver workshops, webinars, on-farm demonstrations
- Build regional farmer networks to facilitate peer-to-peer learning around regenerative soil management
- Share tools, resources, and curriculum online and with Supporting Organizations to increase reach of programs
- Supporting Organizations promote programs to their networks

MONITORING AND EVALUATION

Management Team conducts program evaluation with operational support from Administrator:

- Monitor progress on milestones.
- Collect data on adoption, challenges, feedback, etc.
- Report back to Directors on a quarterly basis about progress
- Review and improve program plan based on successes and challenges

Case Study: 12-18 Month Initiative Addressing Organic Management for Wireworm in Vegetables

STRATEGIC PLANNING

Wireworm continues to be an economically important pest for organic annual vegetable producers. Directors and Management Team pilot a 12 -18 month extension program to identify and disseminate organic best management practices for wireworm control.

Management Team, with operational support from Administrator:

- Identify and engage with primary subsectors affected by wireworm (e.g. small scale diversified vegetable growers, BC Vegetable Marketing Commission members) as key industry partners
- Identify and convene key partners already engaged in wireworm research and management (e.g. Todd Kabaluk at AAFC, IPM consultants)
- Identify Primary Extension Providers/Personnel best positioned to develop and deliver programs to target audiences

PROGRAM PLANNING

Management Team and Primary Extension Providers/Personnel develop programs with operational support from Administrator:

- Consult with producers on current needs and preferred delivery methods
- Consult with pest management specialists (e.g. AAFC, IPM consultants, UBC Biodiversity Research Centre) to identify most promising control options compatible with organic production systems (cultural, physical, mechanical, biological)
- Consult with certification bodies about permitted inputs and brand name products for wireworm control
- Develop content, tools, curriculum on organic management options for wireworm

PROGRAM DELIVERY

Management Team and Primary Extension Providers/Personnel deliver programs with operational support from Administrator:

- Deliver workshops, webinars, on-farm demonstrations, fact sheets
- Share tools, resources, and curriculum with Supporting Organizations
- Work with certification bodies to expand reach of programs and resources
- Mobilize research and extension results to support efforts for organic pesticide registration (as needed)

MONITORING AND EVALUATION

Management Team conducts program evaluation with operational support from Administrator:

- Conduct activity evaluations
- Report back to Directors on a quarterly basis about progress
- Identify next steps based on based on successes and challenges
- Report on results at industry events (e.g. Organic BC conference, Pacific Ag Show, Islands Ag Show)

2.6 EXTENSION JOB PROFILE

One of our key recommendations is to hire dedicated extension agents to ensure sufficient capacity to develop and deliver programs. We have drafted a job profile outlining the primary responsibilities and qualifications for these positions with input from Organic BC working group and Management Team members. One concern raised by collaborators is that it will be difficult to find BC-trained candidates with the ideal combination of education and experience, given the diverse skill-sets required of extension agents. This job profile is intended to be a starting point for further discussions.

Organic Extension Agent - Job Profile

RESPONSIBILITIES:

- Develop, deliver, and evaluate regional extension programs (in-person and online) and resources in collaboration with other organic extension personnel, producers, and other partners
- Contribute to development and delivery of extension programs and resources in other regions and at provincial level
- Conduct outreach and knowledge mobilization with extension audiences and partners, including local producers, researchers, and regional agricultural organizations
- Establish and facilitate effective two-way communications between the sector and the extension service.
- Manage regional extension budget, including quarterly and end of year reporting
- Support/engage in coordinated funding acquisition activities (e.g. grants)
- May be involved in hiring and supervising employees on a project-basis
- Maintain a high level of communication with the Management Team

SKILLS AND COMPETENCIES:

- Strong professional communication skills (interpersonal, email, presentations, publications, social media)
- Ability to translate interdisciplinary scientific knowledge and data into programs, tools, and resources for diverse audiences
- Strong ability to develop and maintain partnerships with collaborating, engaged organizations
- Ability to work independently and take initiative
- Ability to use technology in managing and delivering educational programs
- Ability to design and execute applied research projects
- High level of general agriculture and food system knowledge with specialization (e.g. forage production, range management, vegetable crop production, pest management, farm business planning and management)

QUALIFICATIONS:

- At least 2 years of experience in development and delivery of extension or community-based education programs
- Graduate degree in agriculture or other relevant discipline (or equivalent), with emphasis on organic, regenerative, sustainable, agro-ecological approaches. Particular expertise in one or more critical areas, e.g. pest management, horticulture, animal agriculture, soil science, farm business management
- Experience with farming or ranching using organic, regenerative, sustainable, agro-ecological methods
- Experience working with Indigenous Peoples (First Nations, Métis and Inuit), communities, organizations, governments with understanding of Indigenous culture, history, barriers and issues
- Able to travel within region and BC as required. Have vehicle and valid driver license
- Eligible to register as Professional Agrologist with the BC Institute of Agrologists

3. BUDGET & FUNDING STRATEGY

3.1 FIVE-YEAR BUDGET

The estimated total cost of operating the organic extension service as recommended for the first 5 years is \$3,753,840. This includes a yearly \$28,200 in-kind contribution from partner organizations on the Management Team. The cash contribution needed to start and operate this initiative over 5 years is \$3,612,840.

These budget estimates reflect the phased implementation approach, with 4 agents hired for year 1-3, and 8 agents hired for year 4 and 5. Table 10 provides a summary of the 5-year budget. Please refer to the accompanying spreadsheet entitled “Organic Extension – Phase 3 Detailed Budget Estimates” for more detailed calculations and line item justification.

Table 7. Overview of organic extension service annual costs over year 1-5.

Year	Direct Costs			Indirect Costs	Total Cash Budget	In-kind Contribution from Partner Organizations	Grand Total
	Staffing	Goods and Services	Programming				
1	\$406,250.00	\$57,700.00	\$25,000.00	\$58,674.00	\$547,624.00	\$28,200.00	\$575,824.00
2	\$406,250.00	\$57,700.00	\$25,000.00	\$58,674.00	\$547,624.00	\$28,200.00	\$575,824.00
3	\$406,250.00	\$57,700.00	\$25,000.00	\$58,674.00	\$547,624.00	\$28,200.00	\$575,824.00
4	\$731,250.00	\$103,200.00	\$45,000.00	\$105,534.00	\$984,984.00	\$28,200.00	\$1,013,184.00
5	\$731,250.00	\$103,200.00	\$45,000.00	\$105,534.00	\$984,984.00	\$28,200.00	\$1,013,184.00
Total	\$2,681,250.00	\$379,500.00	\$165,000.00	\$387,090.00	\$3,612,840.00	\$141,000.00	\$3,753,840.00

3.2 PROPOSED FUNDING STRATEGY

Our recommendation for the funding strategy is to take a phased approach in line with the implementation.

- Start up funding over year 1-5.
- Sustained funding after year 5. The estimated annual budget after year 5 is \$1,013,184.00.

The development of a sustainable funding model will be a priority area and key activity over the 5 year period. Through discussions with the Organic BC working group and Management Team members, various funding options have been identified and are discussed in the table below. Where possible, we have provided broad estimates of how much funding could be available from each source. Further work is required to assess the viability of each funding option. Leadership from Organic BC will be critical in pursuing any of these options.

Table 8. Options for sustainable funding sources for organic extension service.

Funding Source	Potential Funding Available	Notes from Sector Discussions
Endowment	Assuming 4% return: <ul style="list-style-type: none"> • \$2M endowment = \$80,000 • \$5M endowment = \$200,000 • \$10M endowment = \$400,000 	This involves working with Organic BC to launch a fundraising campaign and build an endowment during the 5-year start-up period, with Organic BC leveraging its social capital (including relationships with organic wholesalers and well-respected sector pioneers) to develop a campaign and pitch to potential investors. It may take more than 5 years to develop the endowment to an adequately sizeable amount. Discussions with Organic BC indicate this may be a more politically acceptable option than a levy or other sector funding mechanism. It will require sector leadership and dedicated staff capacity to implement. <p>Potential investors to approach:</p> <ul style="list-style-type: none"> • Vancity Community Foundation • Organic corporations: Nature’s Path, Clif Bar • Organic distributors: Horizon Distributors, Discovery Organics, Pro Organics, Jiva, Left Coast • Input vendors: BioFert, West Coast Seeds, Terramera

<p>Organic sector funding mechanism</p>	<p>R&D annual funding generated by other sectors' levies:</p> <ul style="list-style-type: none"> • Raspberry: \$50,000 • Cranberry: \$100,000 <p>Logo licensing: No information available</p> <p>Certification fees: Assuming Organic BC annual certification fees revenue of \$250,000:</p> <ul style="list-style-type: none"> • 5% = \$12,500 • 10% = \$25,000 	<p>It is the perspective of the Organic BC extension working group that “people value what they pay for”, and that it is important that the organic sector provide some ongoing financial support for organic extension. Options for sector funding mechanisms include a check-off/levy, BC Organic logo licensing, or dedicating a portion of organic certification fees to extension. The estimated timeline to explore and implement any of these options is 1 to 2 years to allow for sector consultation. Organic BC would need to work with other organic sector actors (Pro-Cert, Eco-Cert, wholesalers) to build support for any of these options.</p> <p>Check-off/levy: AFF provides guidelines for how to establish an industry development council and fund.</p> <p>Logo licensing: Organic BC has previously discussed the possibility of licensing the BC Certified Organic “Checkmark” logo to non-Organic BC affiliated certifying bodies. An additional benefit of licensing is to have a consistent organic brand across the province.</p> <p>Certification fees: Options include allocating a portion of certification fees towards research and extension funding (no change to current fee schedule), or increasing certification fees.</p>
<p>Cost-recovery through fee-for-service</p>	<p>Depends on type of service</p>	<p>We recommend using the first 5 years to test various fee-for-service schemes and assess producers’ willingness to pay. The Management Team may choose to administer a short survey to producers before implementing any fee-for-service.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Approaching producer associations to “bulk-buy” organic and regenerative extension services for their members. • Charging cost-recovery fees for extension activities, such as registration fees to cover food or event costs. • Charging a small membership fee to receive free or discounted services, similar to Ontario’s Ecological Farmers Association of Ontario. • Implementing a sliding scale of fees depending on size or annual revenue.

<p>Regional district government contributions for regional extension programs</p>	<p>15 regional districts, each contributing \$20,000 annually would generate \$300,000 total</p>	<p>A few regional districts (RDs) in BC have allocated funds towards agricultural support or extension services:</p> <ul style="list-style-type: none"> • Kootenay Boundary Farm Advisors is funded by the 3 Kootenay regional districts and the Columbia Basin Trust at \$60,000 per district per year for 3 years. • The Regional District of Bulkley-Nechako funded and hired an Agricultural Coordinator position for 3 years. • The Regional District of Fraser-Fort George funded Beyond the Market, an agriculture economic development project from 2010-2015. <p>As RDs are directly accountable to their municipalities and taxpayers, regional funds must be allocated to directly service their residents. Based on initial RD meetings, our assessment is that some RDs are more receptive to the idea of allocating resources to extension - in particular, those in central Vancouver Island, Bulkley Nechako, and Fraser-Fort George would be candidates for an initial round of regional extension funding requests. Such districts generally include ‘support for local-regional agriculture and food systems’ etc., but have no mechanisms or personnel to provide direct programming or support to this end. They indicated that they would welcome support via organic-regenerative extension.</p>
<p>Grants</p>	<p>Dependant on grants</p>	<p>Examples of potential grants:</p> <ul style="list-style-type: none"> • Regional foundations: e.g. Columbia Basin Trust, Northern Development Initiative Trust (BC Hydro Peace Agricultural Compensation Fund) • Real Estate Foundation of BC • McConnell Foundation- Sustainable Food Systems program • Vancouver Foundation- Systems Change Grants, Participatory Action Research Grants • Organic Science Cluster <p>Management Team university members could potentially leverage their university foundations (KPU Foundation, UBC Development and Alumni Engagement, UFV Giving) to support fundraising.</p>
<p>AFF</p>		<p>Matching funding from AFF, which could be allocated from the next round of the federal-provincial funding envelope (e.g. Canadian Agricultural Partnership). The organic sector has received previous funding through this envelope. For example, the Organic Sector Development Program provided funding for organic research in BC from 2002 to 2013.</p>

Other government wage subsidy programs		<p>Wage subsidies can off-set the cost of hiring additional personnel while providing youth and underemployed individuals with extension/agrology experience.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Canada Summer Jobs federal subsidy for youth between 15 to 30. • WorkBC Job Creation Partnership supports funding to organizations and provides community benefit while creating jobs to assist unemployed EI eligible clients with opportunities to gain meaningful work experience.
In-kind	Depends on collaborator	In-kind from Directors, Management Team and collaborators, including personnel and capital (e.g. research farms, laboratories, venue space). Such in-kind contributions can and likely would be substantial should an organized, collaborative extension service be advanced.

4. COMMUNICATIONS & OUTREACH

We do not have a detailed communications and outreach plan/recommendation at this time. We anticipate that internal communication will be critical to success of the start-up phase given the collaborative and distributed nature of the Management Team across 7 organizations. The development of an effective internal communication system must be prioritized in the next stage of developing the organic extension service.

As indicated in section 4.5 (Priority Areas and Key Activities), regional and provincial outreach and relationship building will be key activities in the development and delivery of extension programs. Key audiences for external communications include:

- Farmers institutes
- Regional organic certification bodies
- Indigenous communities
- Regional food and agriculture NGOs
- Local and regional governments
- Food and agriculture researchers
- Consultants
- Regional food hubs

The list of extension providers in Appendix D of the Needs Assessment phase 1/2 report is a good starting point for building a contact list and communications plan.

We hope that extension can play a part in supporting the food security and food sovereignty goals of Indigenous communities on their own terms. It will be important to build trust with Indigenous farmers and communities who are interested in integrating more organic and regenerative practices. Engagement and outreach with Indigenous communities should be a priority area within the development of communications and outreach plans.

5. CONCLUSION & NEXT STEPS

We have garnered significant interest and commitment from collaborators who are ready to continue developing the BC-wide organic extension service. Throughout this project, we have been inspired by the passion and interest from our colleagues to work together more intentionally and strategically under the umbrella of extension. It is evident all recognize the need for and potential of a province-wide organic-regenerative extension service.

However, the reality is that this project cannot move forward without initial support and start-up funding. We call upon AFF to demonstrate leadership by supporting this initiative.

We believe an organic extension service meets the foundational principles outlined in the Minister's mandate letter:

- Lasting and meaningful reconciliation: There is an opportunity to provide trust-based support for Indigenous communities towards meeting their goals around agricultural development and food security.
- Equity and anti-racism: Make extension programs more widely available, including outreach to farms and businesses who are underserved or face barriers, such as cost or distance, to accessing extension.
- A better future through fighting climate change: Organic and regenerative agriculture practices that improve soil health, biodiversity, and ecosystem health are important actions for reducing agricultural greenhouse gas emissions and sequestering carbon in the soil.
- A strong, sustainable economy that works for everyone: Extension supports farms and businesses to be more profitable, viable, and sustainable.
- Development of a new Regenerative Agricultural Network: Extension will link farmers, ranchers, and businesses throughout the province that are interested in learning about and adopting organic-regenerative practices.

Public investment in organic and regenerative agriculture must be a part of our province's pandemic recovery plan. Organic extension has the potential to support our agriculture and food sector to build back stronger with sustainability and equity at its core.