Growing Resilience

Capital Region Food and Agriculture Initiative Roundtable
Good Food Summit
November 21, 2019
Esquimalt and Songhess Nations Territory
and Victoria, BC
Our food system is the foundation of our sustainable, resilient future.

No sustainable food system, no sustainable humanity.
Global-Industrial Food System

all our eggs are in one basket

and that basket is not sustainable socially, economically, or environmentally
Not socially equitable or morally just
Canadian/ BC Food Insecurity

9.2% Canadian households food insecure

50% in lowest income group

B.C. reports slightly higher rates

3 sub-populations predominate

- Families headed by single women
- Marginally housed and homeless
- Indigenous peoples (particularly on reservations)

Ostrey, A. 2010
Food for Thought
Provincial Health Services Authority
‘Western disease’ epidemic – rising health care costs
obesity, diabetes, childhood onset diabetes, high cholesterol, chronic heart disease

Our children may be the first generation with a life span shorter than their parents

Clancy, K. 2003
Union of Concerned Scientists
Not economically sustainable
Cost of production far exceeds revenue potential
BC Agriculture in the red

2010- B.C. agriculture grossed $2.5 billion
lost $119 million

2014- B.C. agriculture lost $63 million

“Cumulatively B.C. [farming] is not a healthy industry”

Garnet Etsell, Chair
B.C. Agriculture Council
Vancouver Sun, June 11, 2011
“Faith in the paradigm of productivity has made most farmers not only poorer, but also exposed to more risk.”
Food costs outpacing inflation

Canadian inflation 2008

Overall- 1.2 %
Food overall- 7.3 %
Cereal products- 12.4 %
Fruits/ vegetables- 26.9 %
Food system oligopolies, no ‘free market’

4 corporations - 80% of North American beef packing
3 corporations - 75% of North American pork packing
4 corporations - 62% Canadian flour milling
4 corporations - 62% Canadian food retail
1 corporation - 90% of Canadian dairy processing
5 corporations - 80% of world crop seed

National Farmers Union, 1999
Office of Consumer Affairs, Canada, 2013
Vancouver Sun, 2008
Heffernan W., 2003
Corporate hegemony

“We now have a global food system that is impervious to true consumer interests. Food is produced, processed and distributed almost entirely to meet the short-term business interests of the global food firms.”

Kirshenmann, F., Leopold Center for Sustainable Agriculture Iowa State University, In Mullinix ed., 2005
Not environmentally sustainable

- Habitat/ biodiversity destruction
- Pesticide and fertilizer contamination
- Soil erosion/ salinization/ desertification
- Noxious waste/ pollution of air, water, soil
- Aquifer and ground water depletion
- Genetically Modified Organisms
- Greenhouse gas emissions
Sustainability Gorillas in the Room
Resources exhausted

Agriculture uses 70% of the world's fresh water—we're tapped out

The world is farming all the land there is to farm—can't create more

Brown, L., 2012
Full Planet, Empty Plates
Utter dependence on fossil fuel

With a negative energy return on energy invested (EROEI)

1:5 on average
1:50 for your hamburger

formerly (1940) agriculture afforded a positive EROEI; 2.5:1
the “common assumption that a warming climate will be a boon for agriculture production in northern climates is now recognized as false”
The global-industrial system didn’t just happen

Intentional government, industry, university complicity
An alternate resilient food system won’t just happen either

it will take the same kind of purposeful collaboration
We need a shared food system vision

A description of what we’d like our food system to be, look like, in ten or twenty years

With well delineated:

• Objectives
• Components
• Configuration
• Ways of operating
From a food system vision we can develop short and long-term objectives, strategy, and action plans.

Otherwise I fear our disparate efforts will not be sufficiently successful.
Our vision must take challenges and opportunities in account

Opportunity:
- Good food producing lands, ALR
- Proximity to communities/markets
- Awareness/ local food movement
- $17 billion spent on food annually
- New generation wants to farm
- Awareness of Indigenous sovereignty
- Strong Indigenous leadership

Challenges:
- Climate change
- Environmental degradation
- Fossil fuel dependence
- High price of farmland
- Export focused policy regime
- Little processing & distribution
- Aging farmers
Food system attributes we might envision to confer resiliency, sustainability
The Food System

Pre-Production
- Agricultural Inputs
- Traditional Knowledge
- Farming Practices

Farming + Indigenous Harvest

Direct Market Supply Chain
- Processing + Storage
- Distribution + Marketing
- Wholesale
- Retail
- Sharing

Conventional Supply Chain
- Processing + Storage
- Distribution + Marketing
- Wholesale
- Retail
- Sharing

Consumption
- Households
- Institutions
- Restaurants

Waste Stream Reduction and Management
Waste is produced at all stages of the process and can be recovered and captured for energy, composting, redistribution and much more

Food Security | Ecological Footprint | FOOD SYSTEMS THINKING | Indigenous Food Sovereignty | Socio-cultural Systems
Food Self-Reliance | Health | Economy | Community Resilience | Environmental Stewardship | Livelihood
Our Touchstone

Nurturing Mother Earth, and reciprocally human physical and spiritual well being.
Scale and focus

PLACE-BASED
Bioregions
Areas that share similar topography, plant and animal life, and human culture
Bioregional Food Systems

Operating per the environmental capacity of the bioregion, for local communities and local economies, and in balance with an appropriate national and trans-national system

- Diversity of smaller scale farms and businesses
- Low input, human intensive
- Environmentally sound
- Alternate market channels
- Community centered
- Local economy focused
Unprecedented scale of planning and development will require cross-jurisdictional cooperation.
Food lands are accessible

de-commodify, regulate who can use food land and how it can be used
Our food system must be a powerful instrument for reconciliation, Indigenous Nation sovereignty.
Regional processing and distribution capacity must accommodate production and markets
Co-operatives will play a critical role

- For all food system aspects - supply, production, post-production, finance
- To gain economies of scale, economic clout, retain decision making
- Can embrace the triple bottom line of sustainability
- Retain wealth created within our communities
Formal and informal agriculture education programming

- KPU BASc- Sustainable Agriculture
- KPU Tsawassen First Nation and Richmond Farm Schools
- KPU Graduate Certificate- Sustainable Food Systems and Security
- Sandown Farm et al.
50 million farmers
needed in Canada and U.S. for post peak-oil agriculture

20% of our population

Heinberg, R., 2006
Post Carbon Institute
Will have sustainable food system leaders and builders of all stripes

- Teachers
- Business persons
- Planners/ municipal and First Nation govt. staff
- Researchers/ professors/extension agents
- Spiritual leaders
- Elected officials
- Community leaders
- NGO staff
- Bureaucrats
Knowledgeable, supportive citizenry

Extensive and sustained, citizen targeted, food system awareness/education programming

To pull regional foods through the marketplace (as opposed to pushing)
Applied research capacity

• Focus- sustainable agriculture, regional food systems, community development, environmental stewardship

• Address challenges and opportunities, knowledge gaps

• For knowledge, method, tool creation
Reform food system research/development funding environment in BC

Alternate food system activists, organizations all competing for the same, limited resources
Established, Cohesive Extension Service

For purposeful knowledge transfer and adoption, to affect systemic change/ improvement

- Provide direct sector support to farmers and other food system actors
- Focus on any aspect of agriculture/ food system
- Inextricably linked to applied research
Effective Applied Research and Extension
predicated on relationships

Genuine, mutually respectful, durable, roll-up the sleeves, get things done, partnerships
Enabling policy environment

i.e. a combination of directives, incentives and regulations that advance a resilient food system

• Comprehensive, coherent policy between levels of government
• Comprehensive, coherent policy within a bioregion
• Coherence between types of policy (e.g. high level vs. enabling)

Policy is what makes things happen, or not
Concluding thoughts
“The significant problems we face cannot be solved at the same level of thinking we were at when we created them.”

Albert Einstein
Don’t fight, rather let’s eclipse, the global-industrial food system
Our food system is a clear and primal manifestation of our worldview, and way of being human
Our food, our food system, our economy, and our children's, children's future

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Burning question

How can we effectively go about developing a ‘resilient food system’ vision for BC?