



Institute for Sustainable Food Systems

Growing Resilience

Capital Region Food and Agriculture Initiative Rountable
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

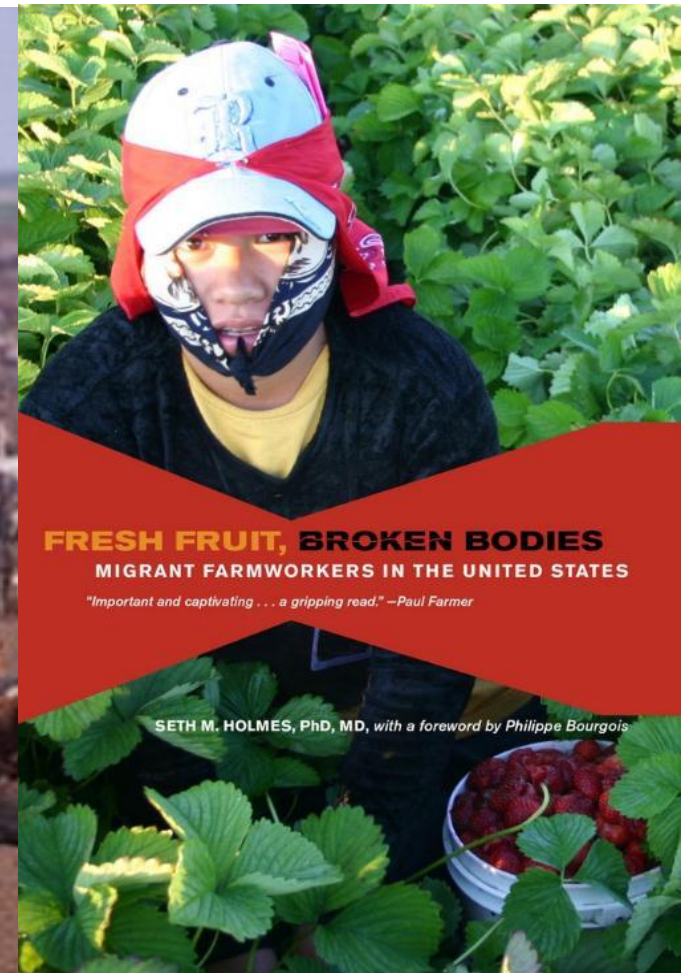
Global-Industrial Food System

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)

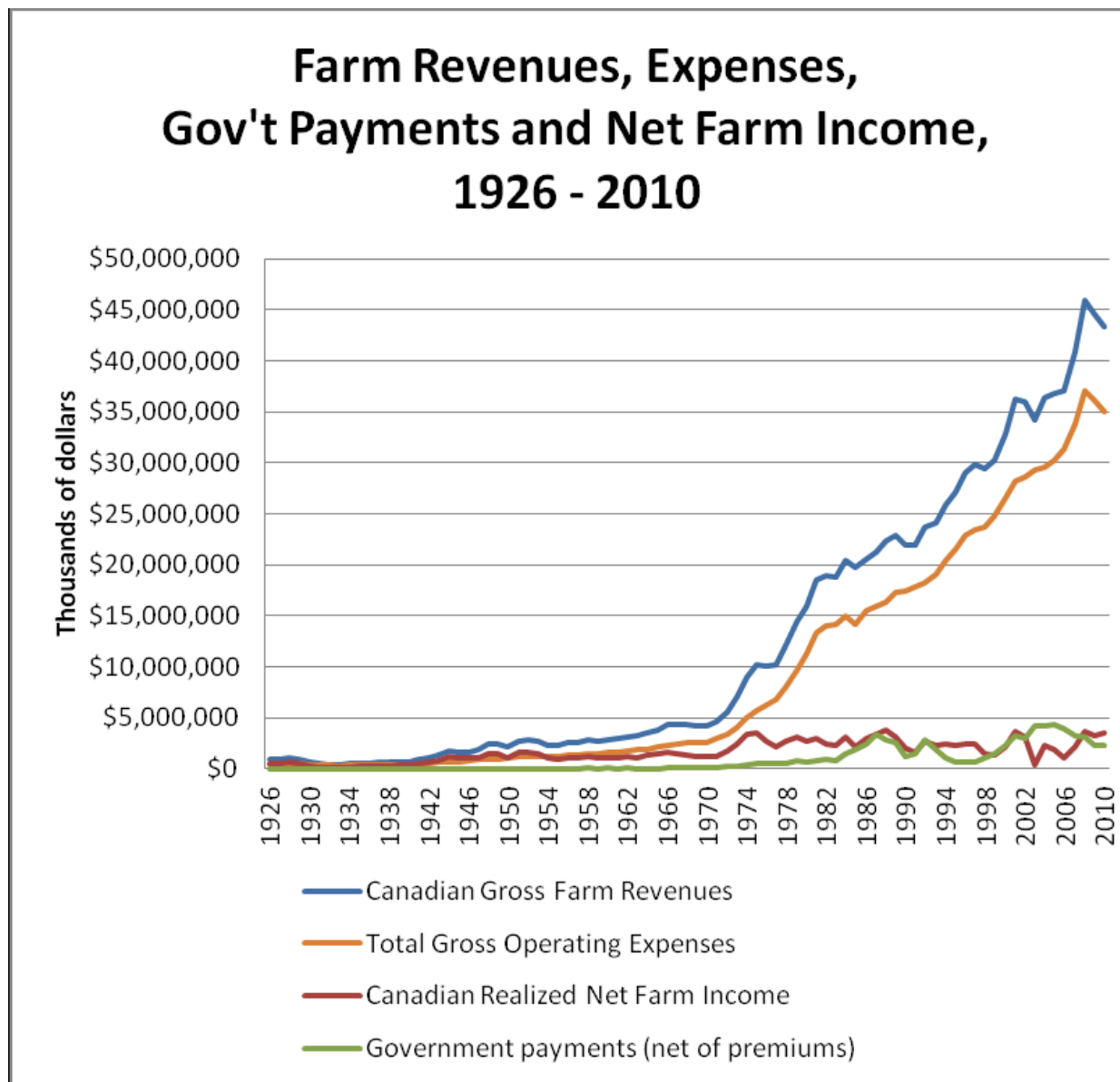
‘Western disease’ epidemic- rising health care costs

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

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**

Statistics Canada

*“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.”



AUCTION SALE
OF ALL FARM STOCK AND MACHINERY AND HOUSEHOLD EQUIPMENT
PETER L. HAAG FARM
Six Miles North of New Hradec or 14 Miles Southwest of Manning
Wednesday, July 29
Sale Starts at 10:00 A. M. Free Lunch at Noon

LIVESTOCK		
4 Head Horses	4 Heifers	1 Purebred Black Angus
2 Good Milk Cows	2 Steers	Bull, One Year Old
6 Yearlings	7 Spring Calves	100 Young Chickens

FARM MACHINERY	HOUSE HOLD GOODS	
1 8-Foot McCormick-Deering Binder	1 Water Tank	1 Cook Stove
1 14-Inch Moline Gang Plow	1 4-Wheel Trailer	1 3-Burner Oil Stove
1 16-Inch J. I. Case Sulkey Plow	Set of Blacksmith Tools	1 Large Kitchen Cabinet
1 8-Foot Disc	1 Engine Pump Jack	2 Kitchen Tables
2 Hay Rakes	1 Grind Mill	1 Heater
1 McCormick-Deering Mower		1 Bed Complete With Spring and Mattress
1 22-Foot Steel Drag		2 Bedsteads
1 Horse Potato Cultivator		1 Mattress
1 Bob Sled		1 Sink Wash Stand
2 Wagons With Boxes		1 "Lacta" Cream Separator
1 Steel Truck Wagon With Hay Rack		1 Rug 9x12
		1 Wheel Chair
		1 Wardway Washing Machine (New)
		Dishes, Cream Cans, Kitchen Utensils

Other Articles Too Numerous to Mention

ALL PROPERTY MUST BE SOLD
TERMS—Cash or Negotiable Paper
RAY SCHNELL, Auctioneer PETER J. HAAG, Clerk



Food costs outpacing inflation

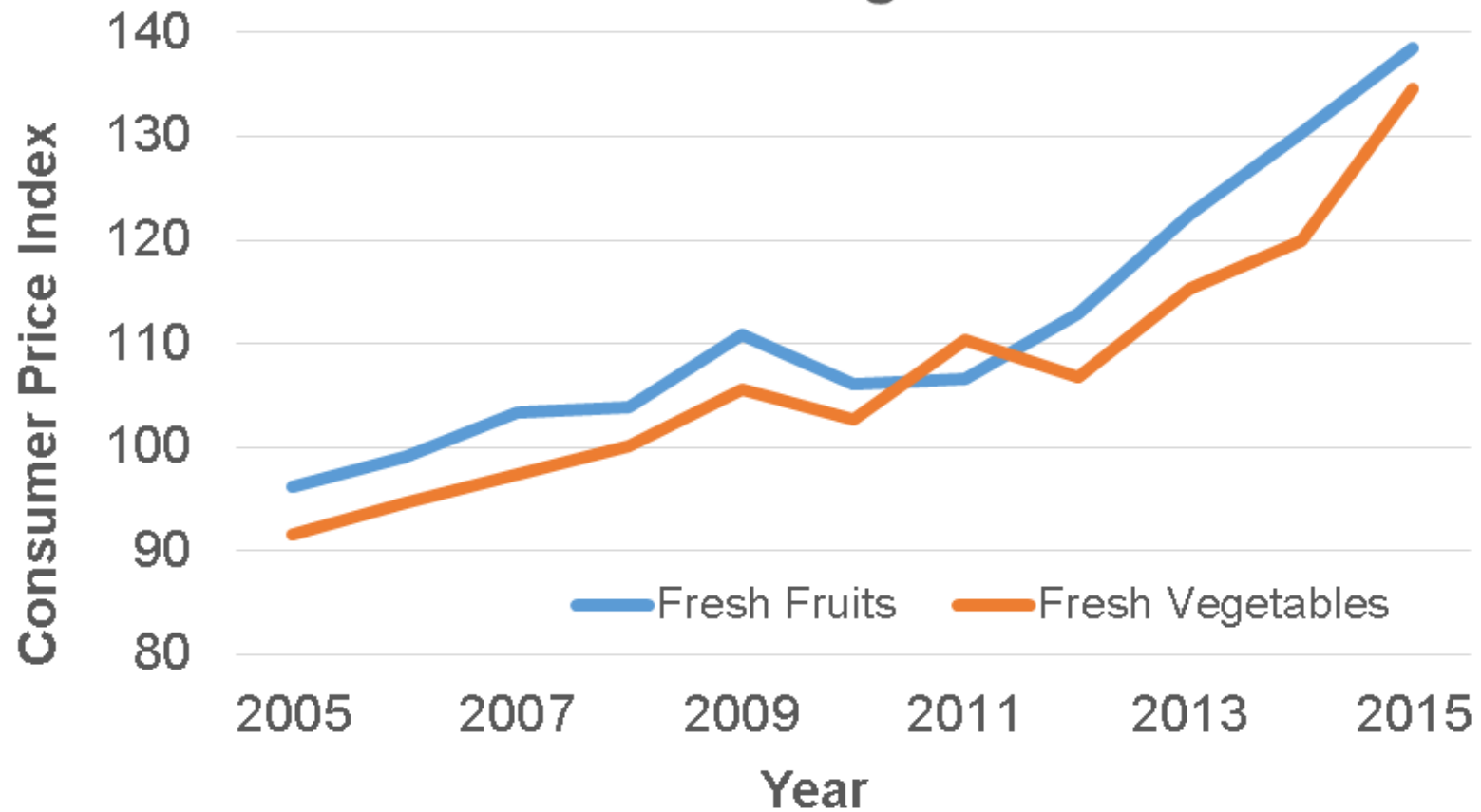
Canadian inflation 2008



Overall-	1.2 %
Food overall-	7.3 %
Cereal products-	12.4 %
Fruits/ vegetables-	26.9 %



B.C. Consumer Price Index for Fresh Fruits and Vegetables



Source: Statistics Canada 2016
(CANSIM, table 326-0021 and Catalogue nos. 62-001-X and 62-010-X)

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

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

Climate Change

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

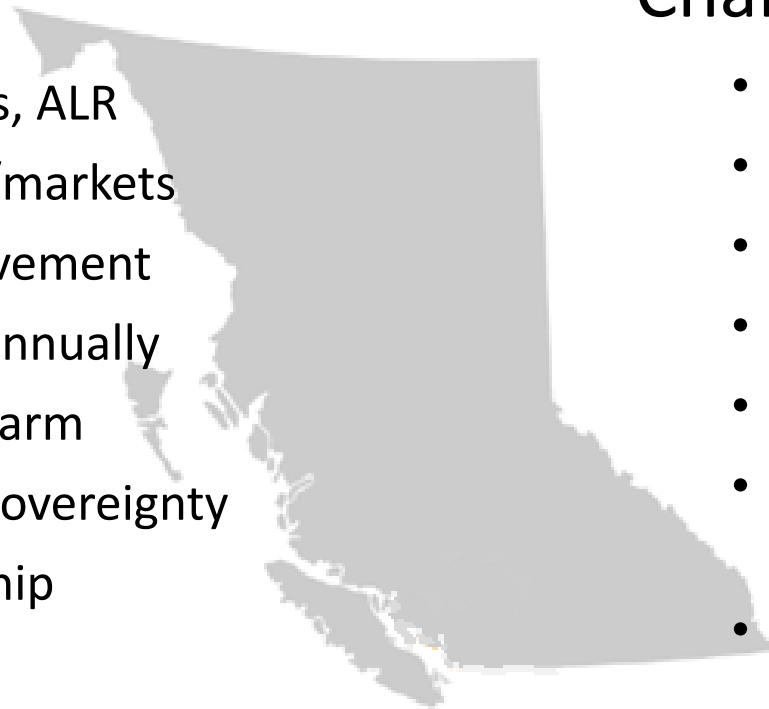
From a food system vision we can develop short and long-term objectives, strategy, and action plans

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



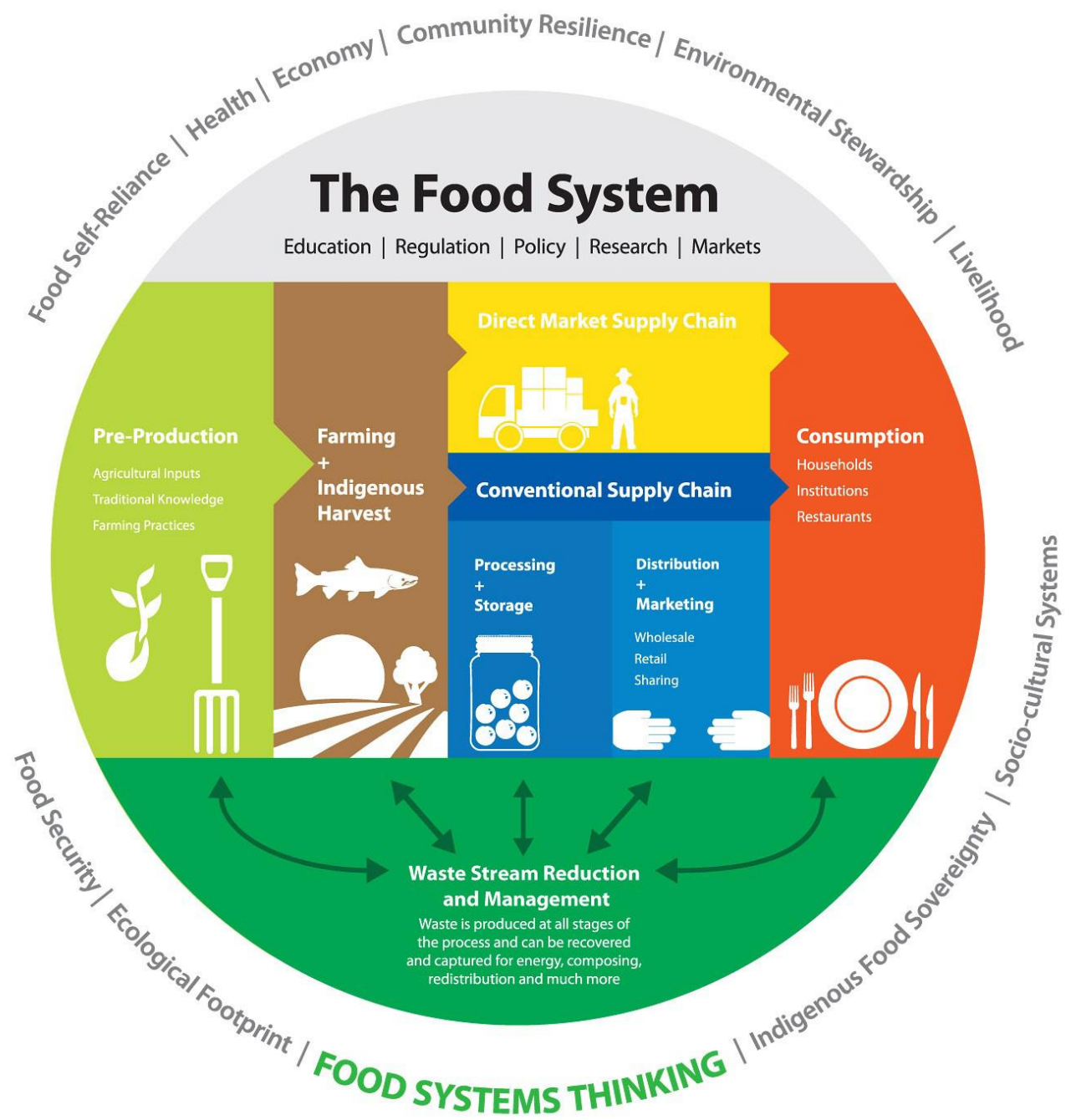
Challenges:

- 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



Our Touchstone

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



Scale and focus



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

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

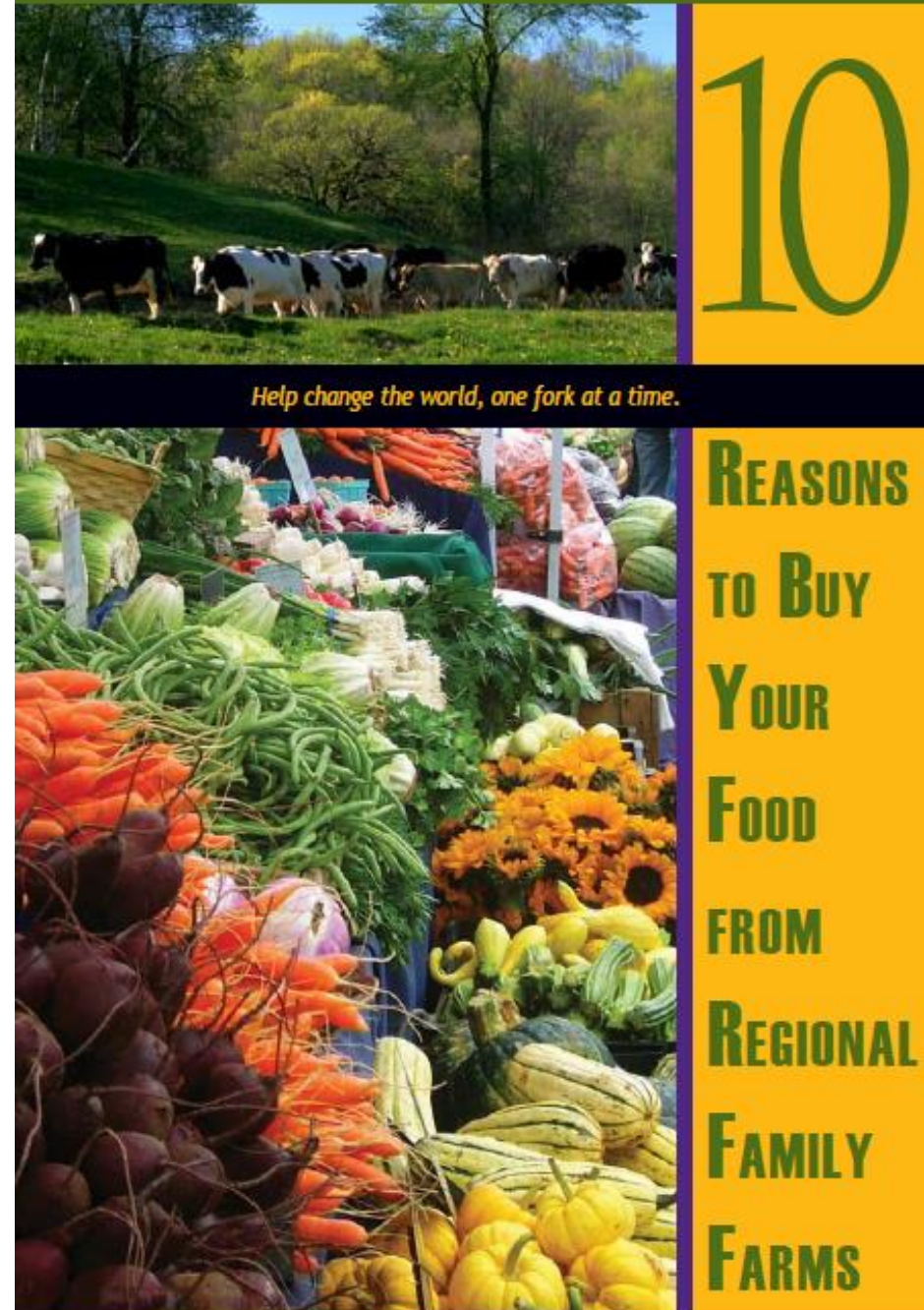
NGO staff

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

An aerial photograph of a rural farmstead. In the foreground, there are green fields and a large white barn with a grey roof. To the right, there's a red barn and a white house. In the background, there are rolling hills, more farm buildings, and a large field of tall crops, possibly corn. The sky is overcast with grey clouds. The overall scene is a typical rural landscape.

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?